

FIG. 1

2807.2.4.10

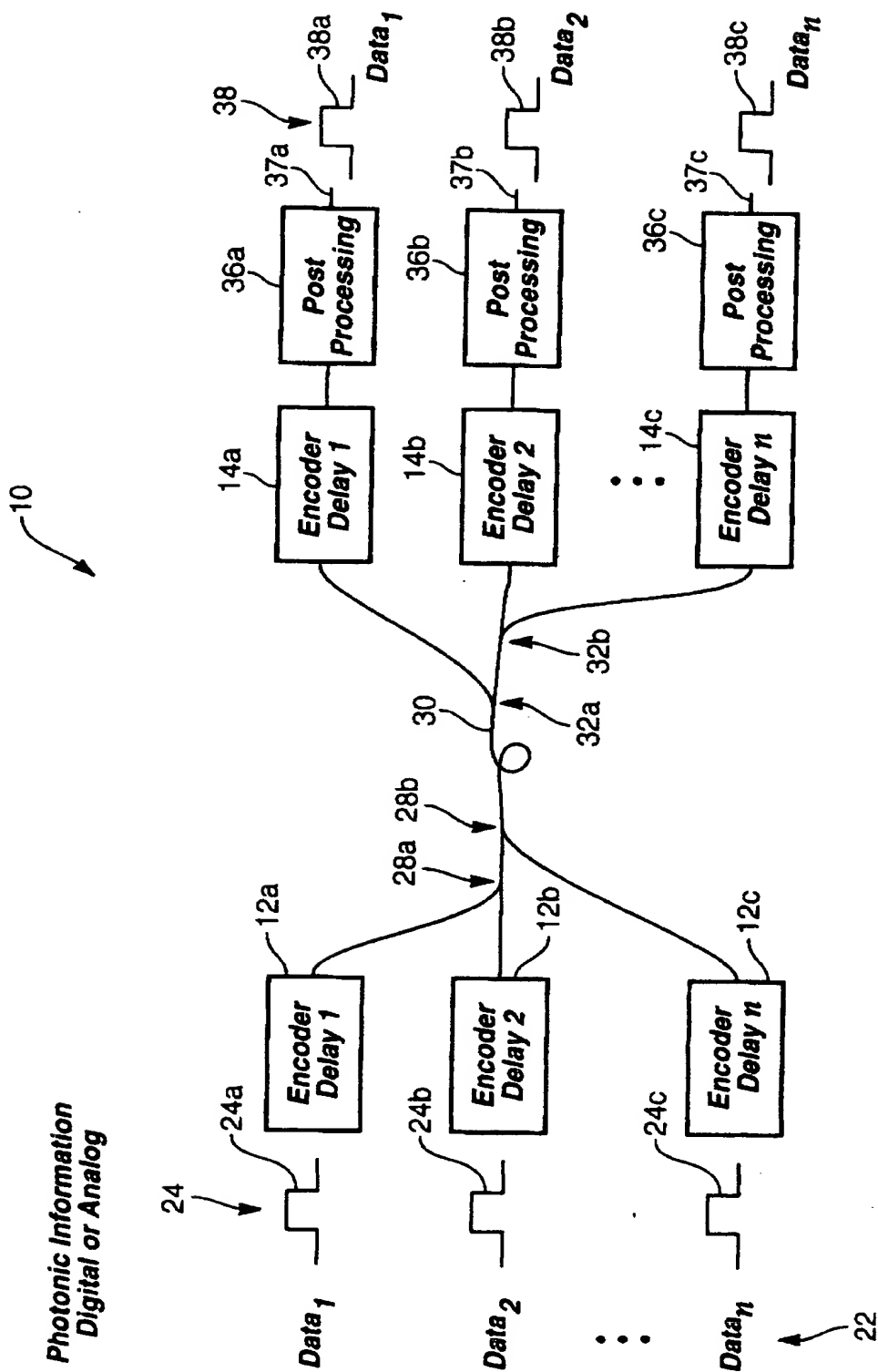
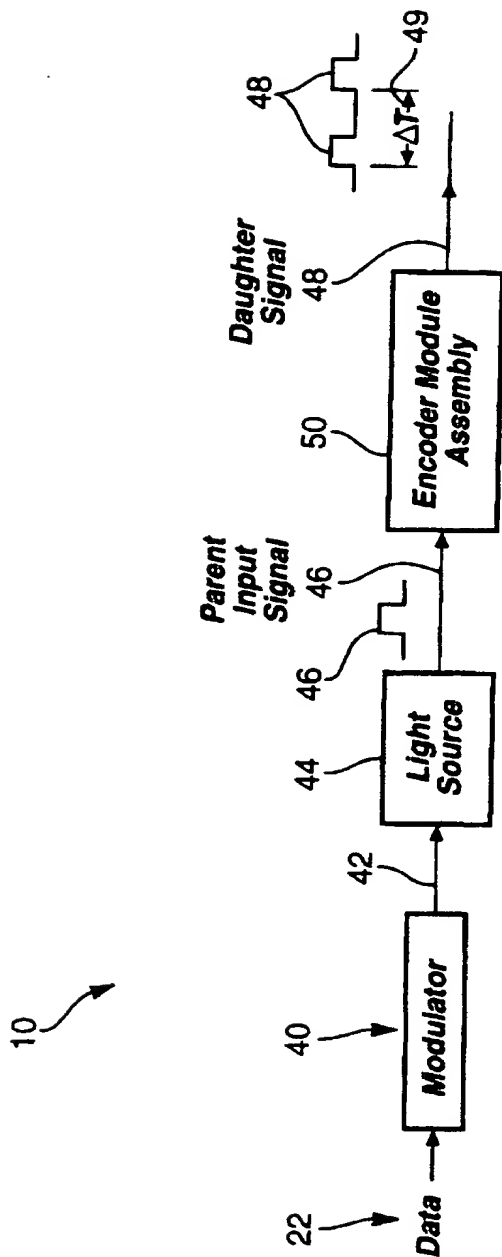


Fig. 2

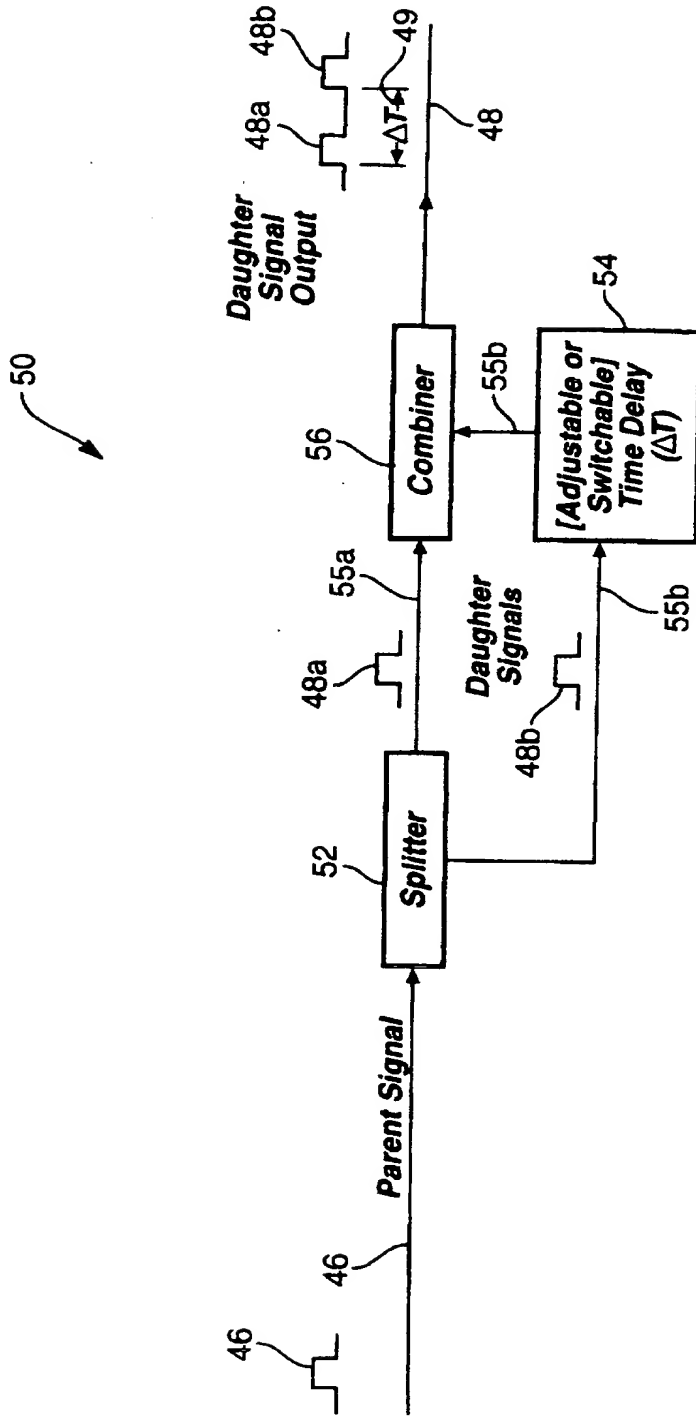
2807.2.4.10



Differential Delay Multiplexer Sender/Encoder

Fig. 3

2807.2.4.10



Differential Delay Multiplexer (DDM) Sender/Encoder

Fig. 4

2807.2.4.

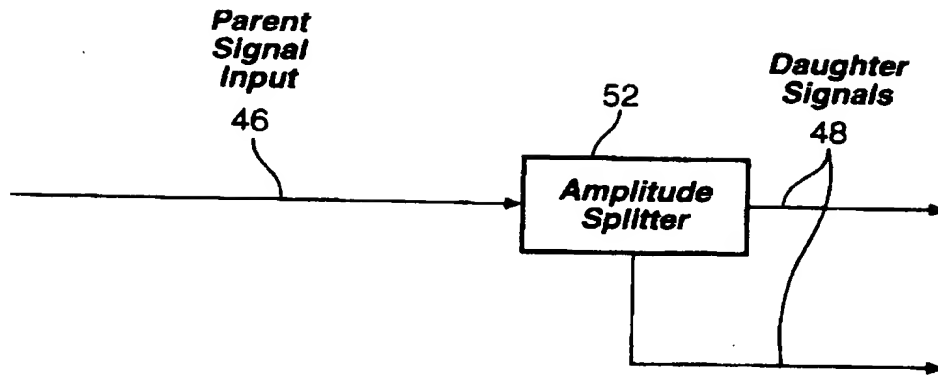
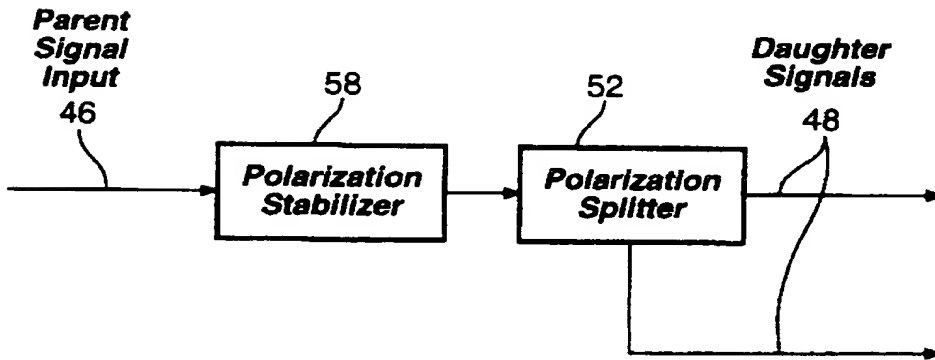


FIG. 5

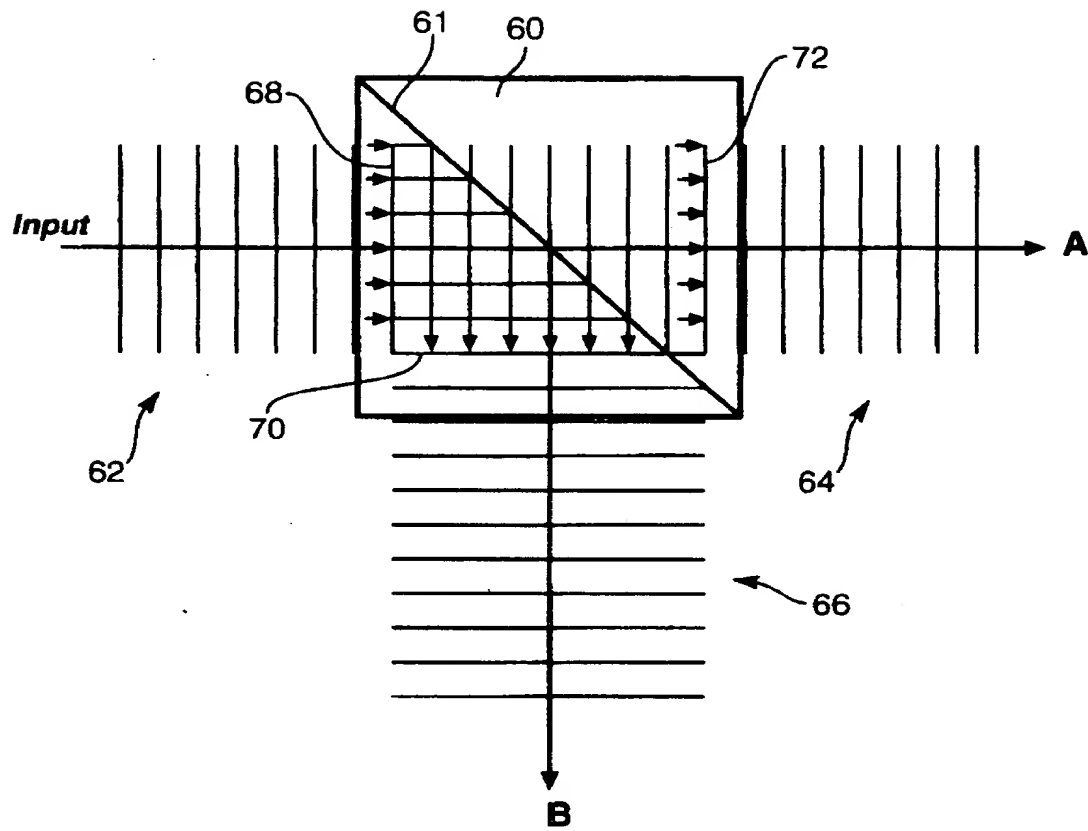


Splitting Criteria

FIG. 6

2807.2.4.

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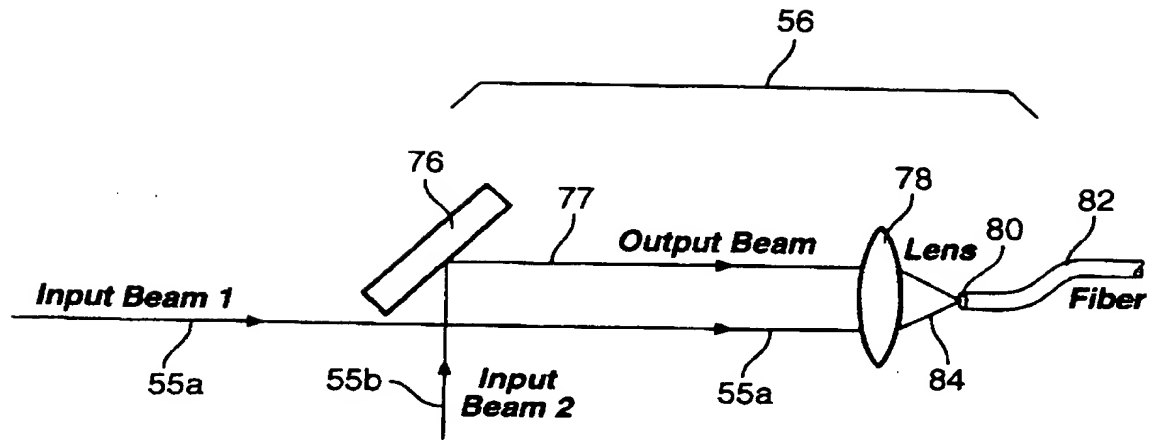
Amplitude or Polarization Splitter

FIG. 7

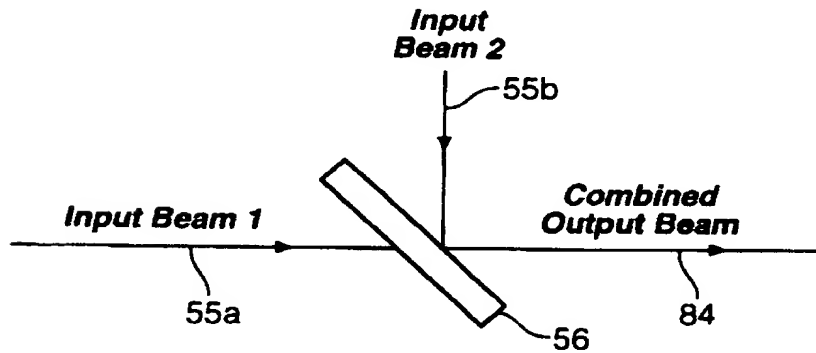
2807.2.4.



2807.2.4.

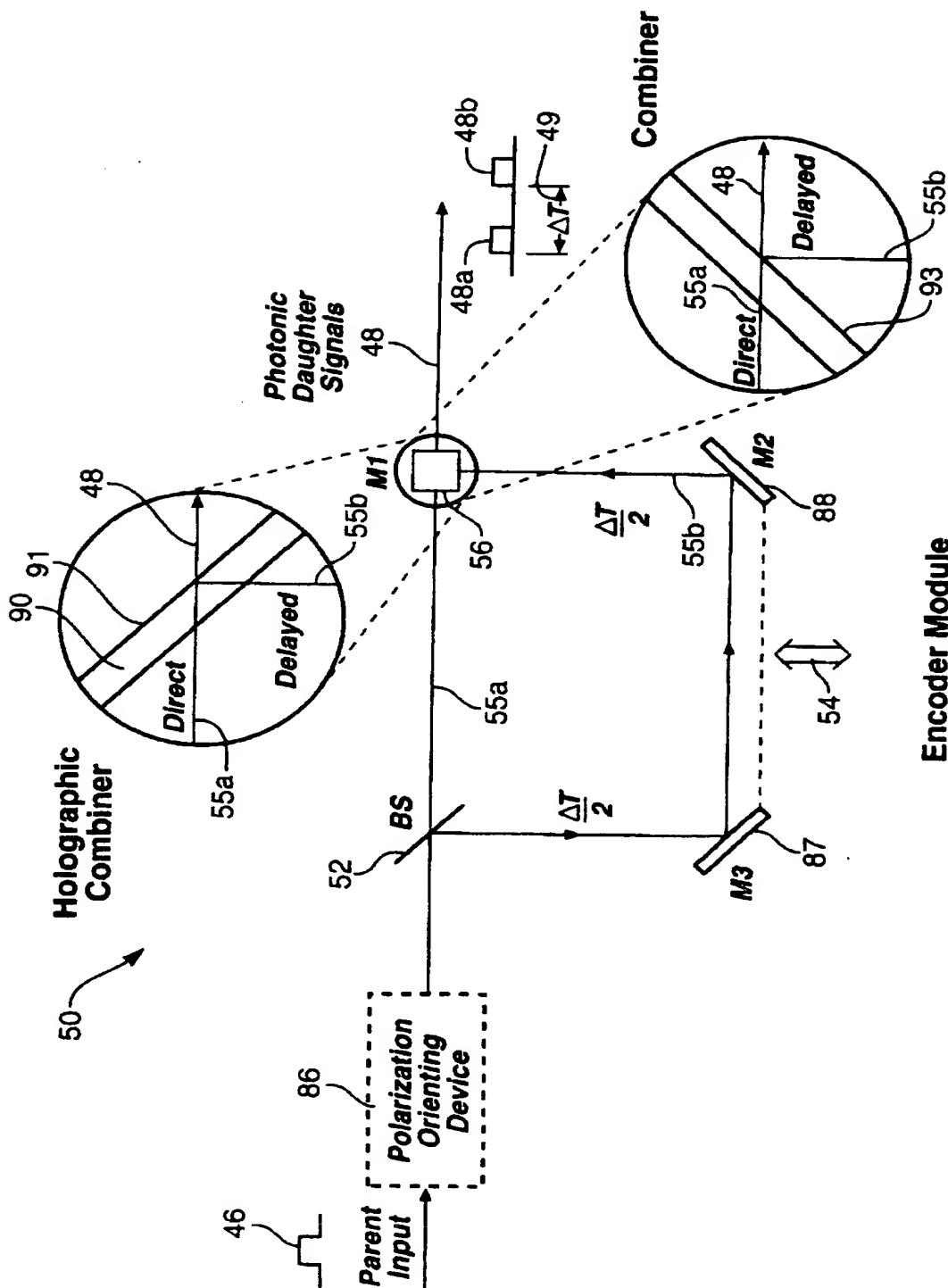


Beam Combiner
FIG. 8



Amplitude or Polarization Combiner

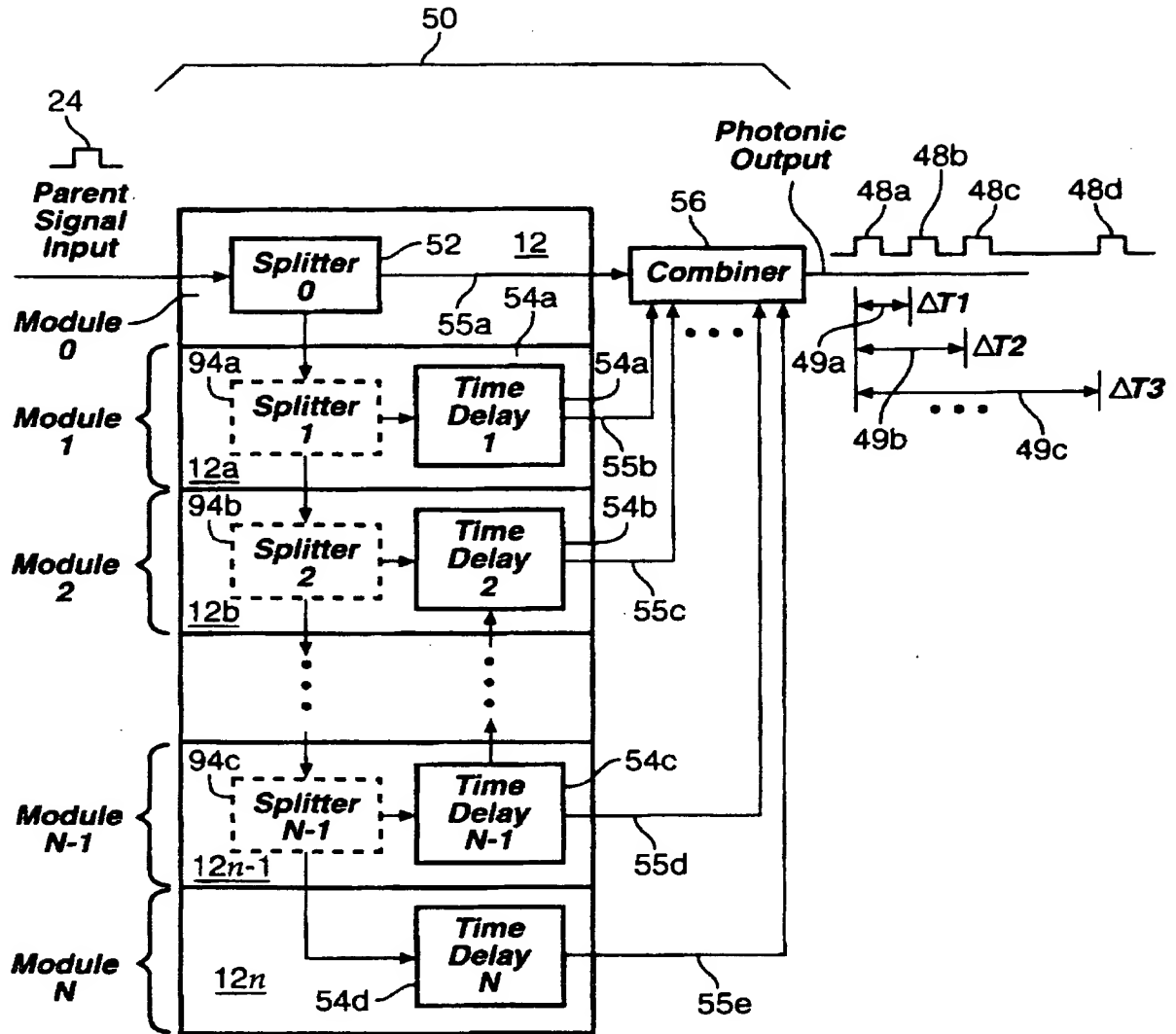
FIG. 9



Encoder Module

Fig. 10

2807.2.4.



Composite Encoder
Module Assembly

FIG. 11

2807.2.4.

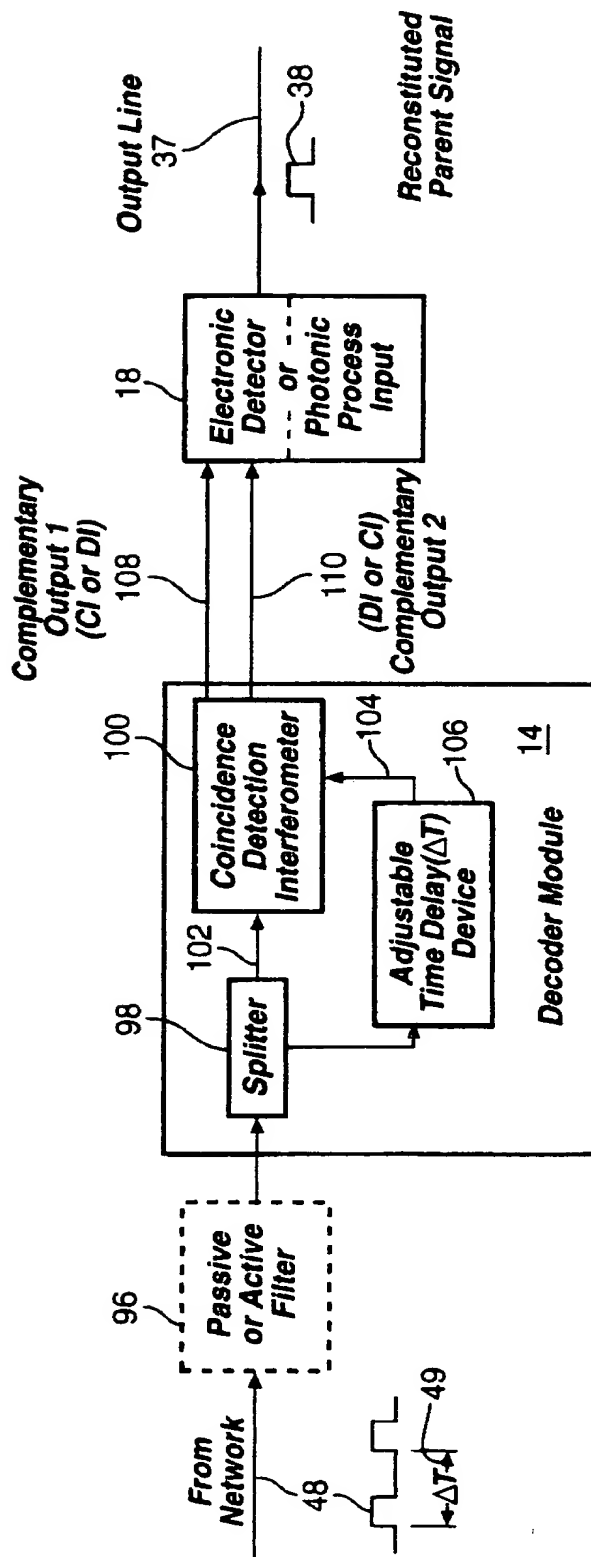


Fig. 12

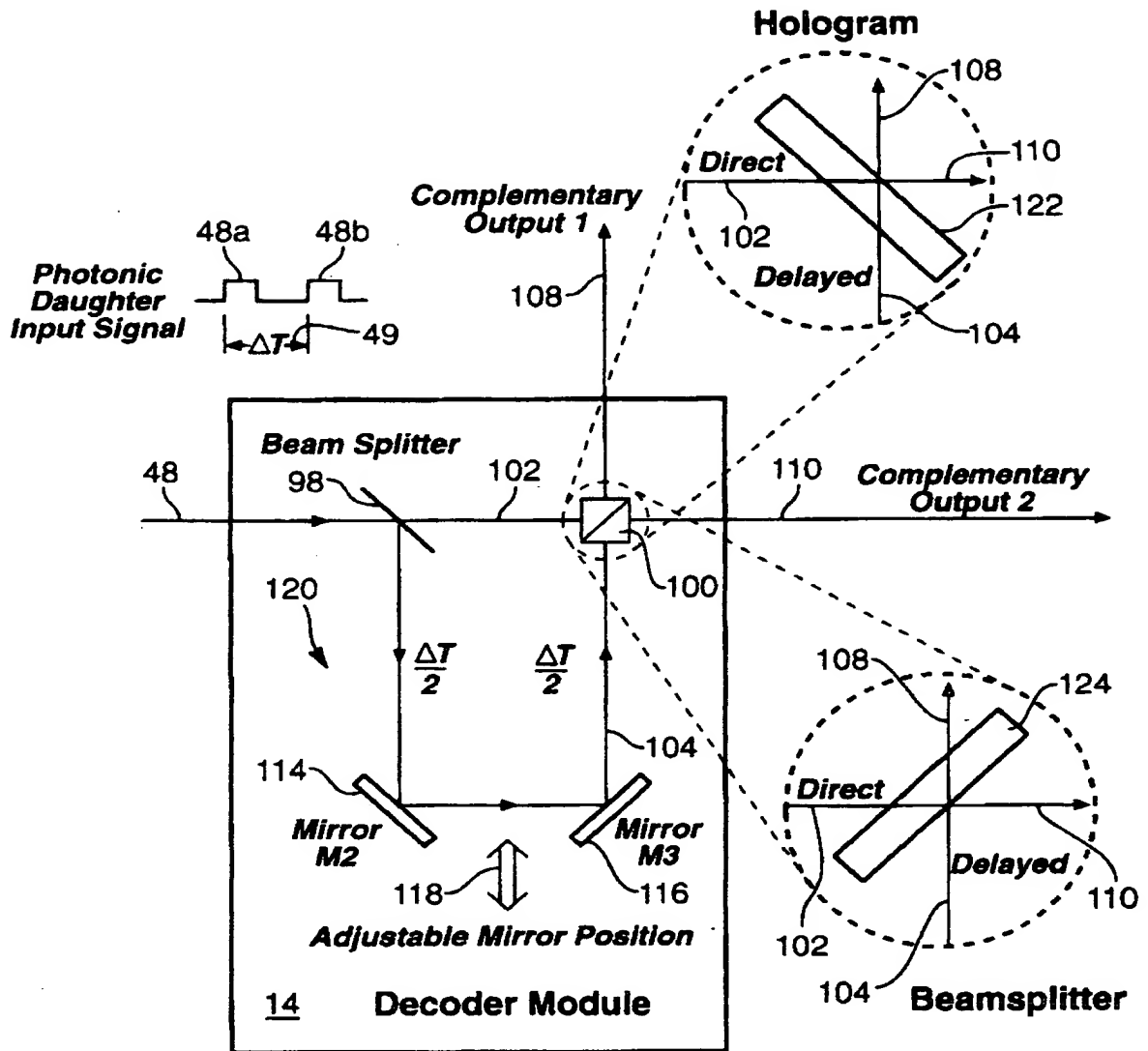


FIG. 13

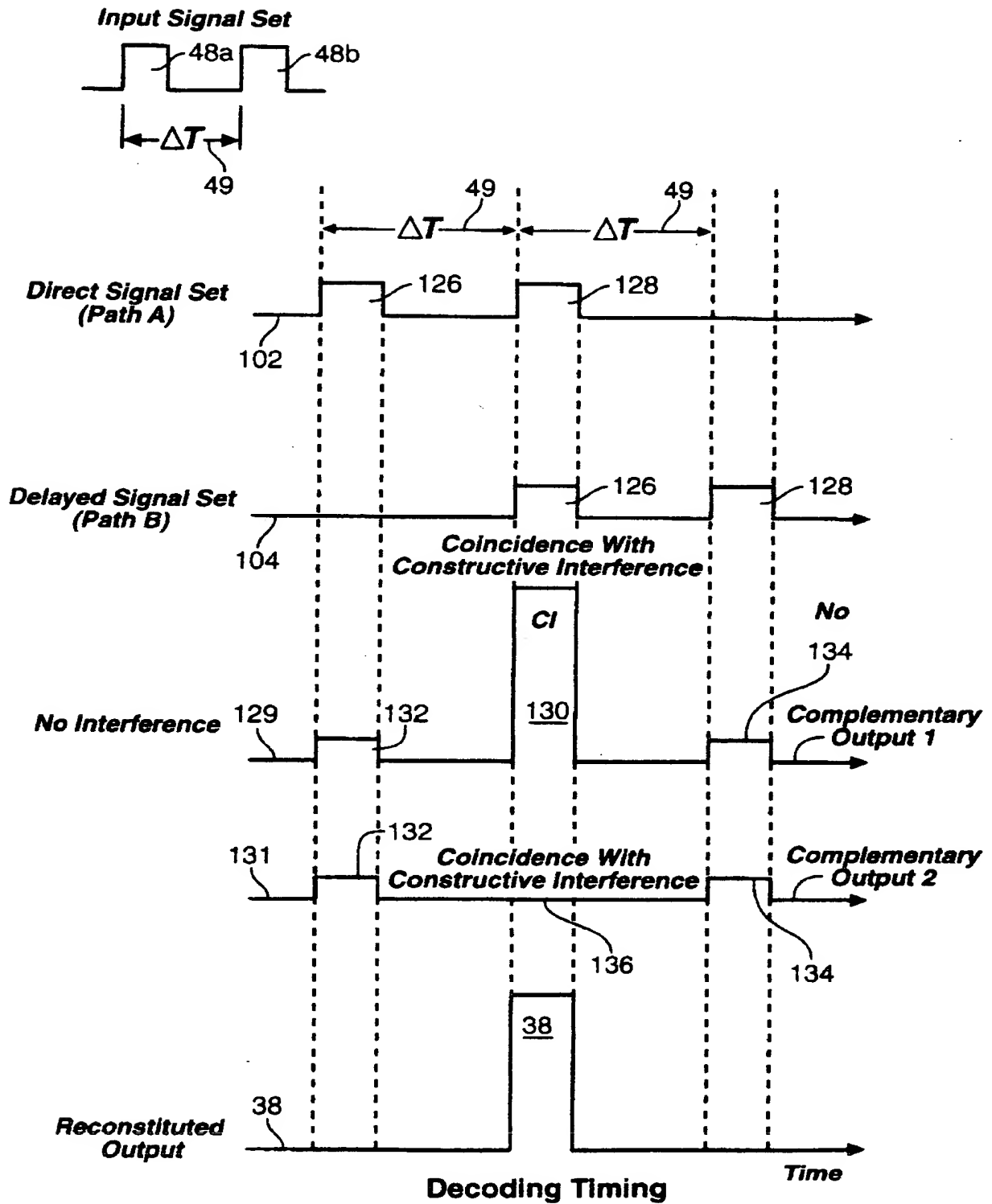


FIG. 14

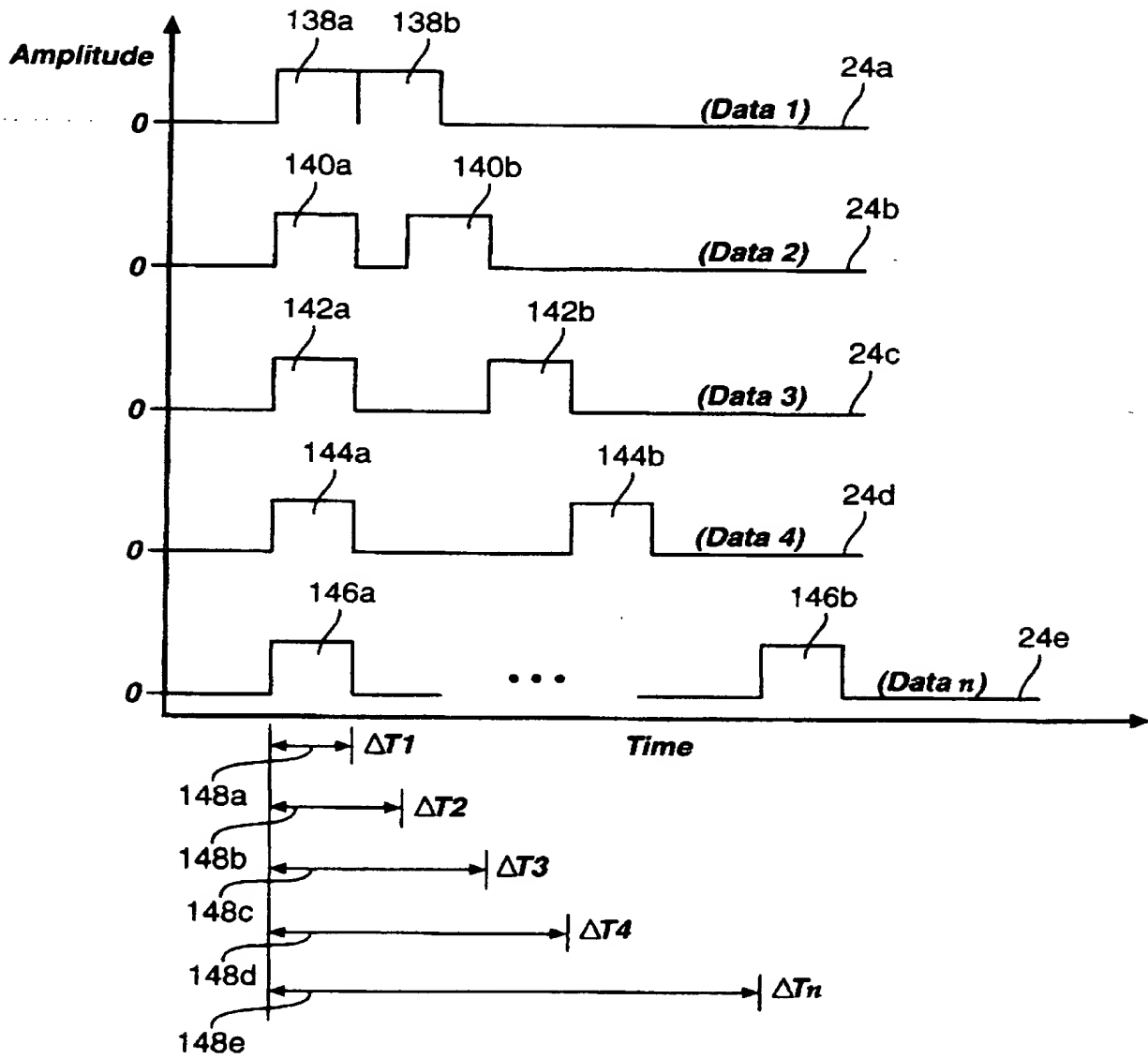


Fig. 15

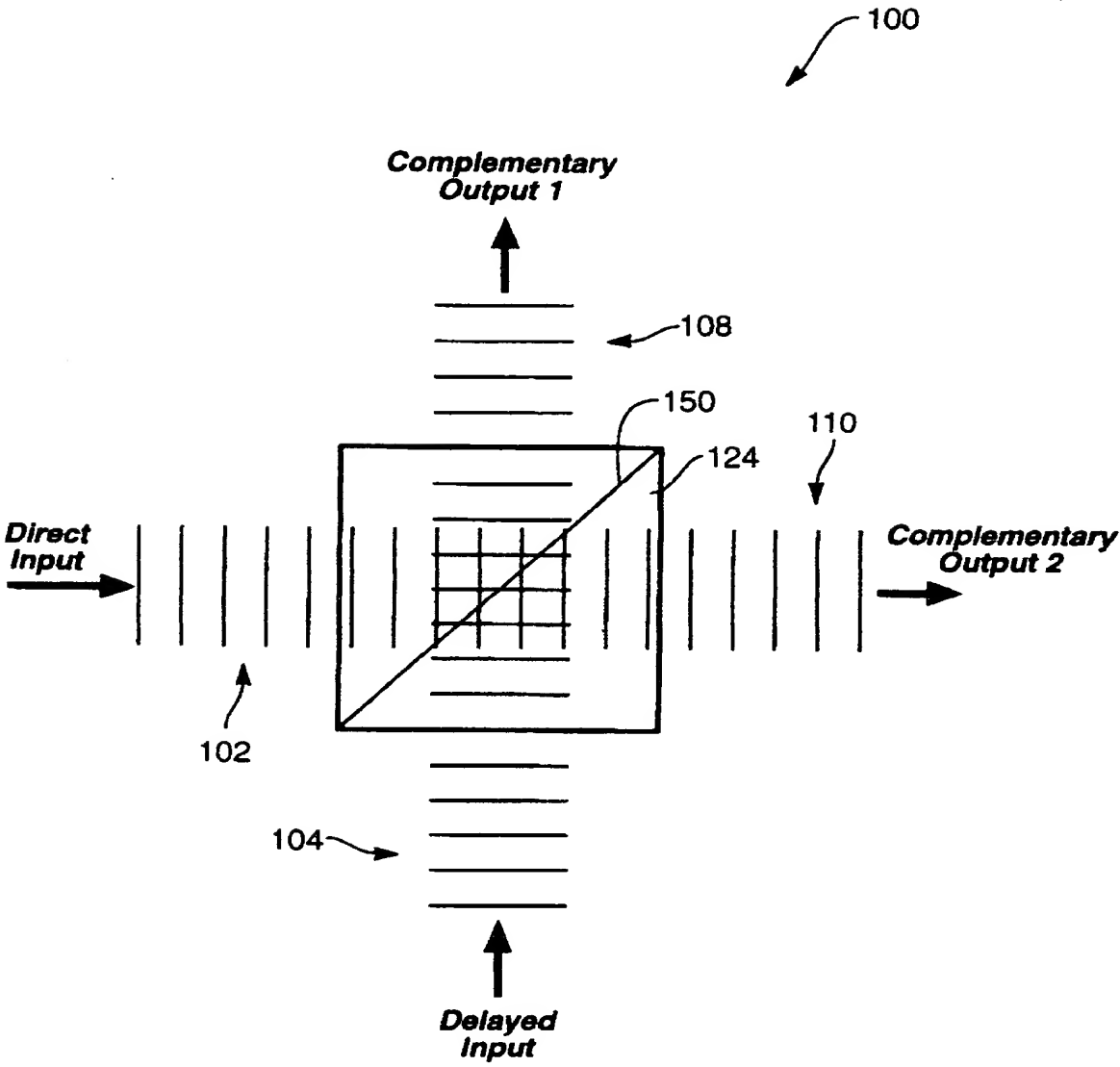


Fig. 16

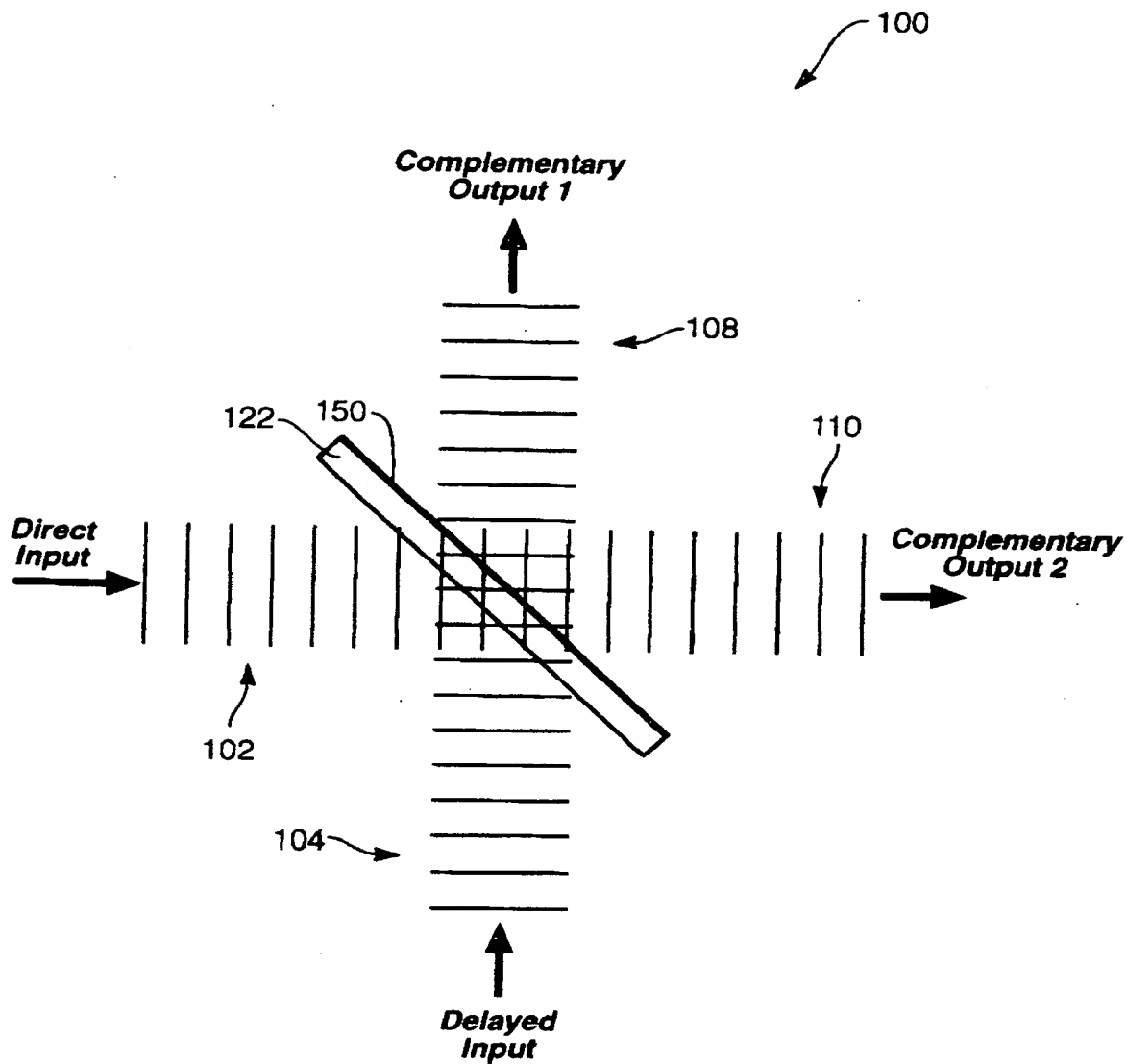


Fig. 17

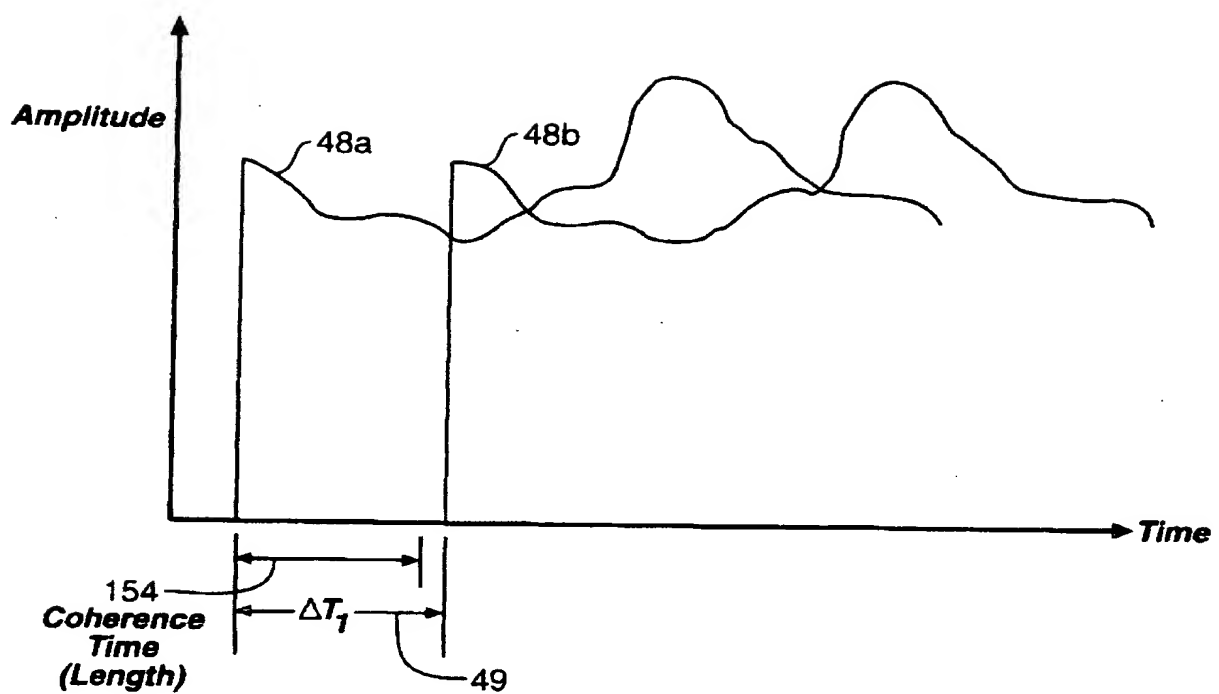


Fig. 18

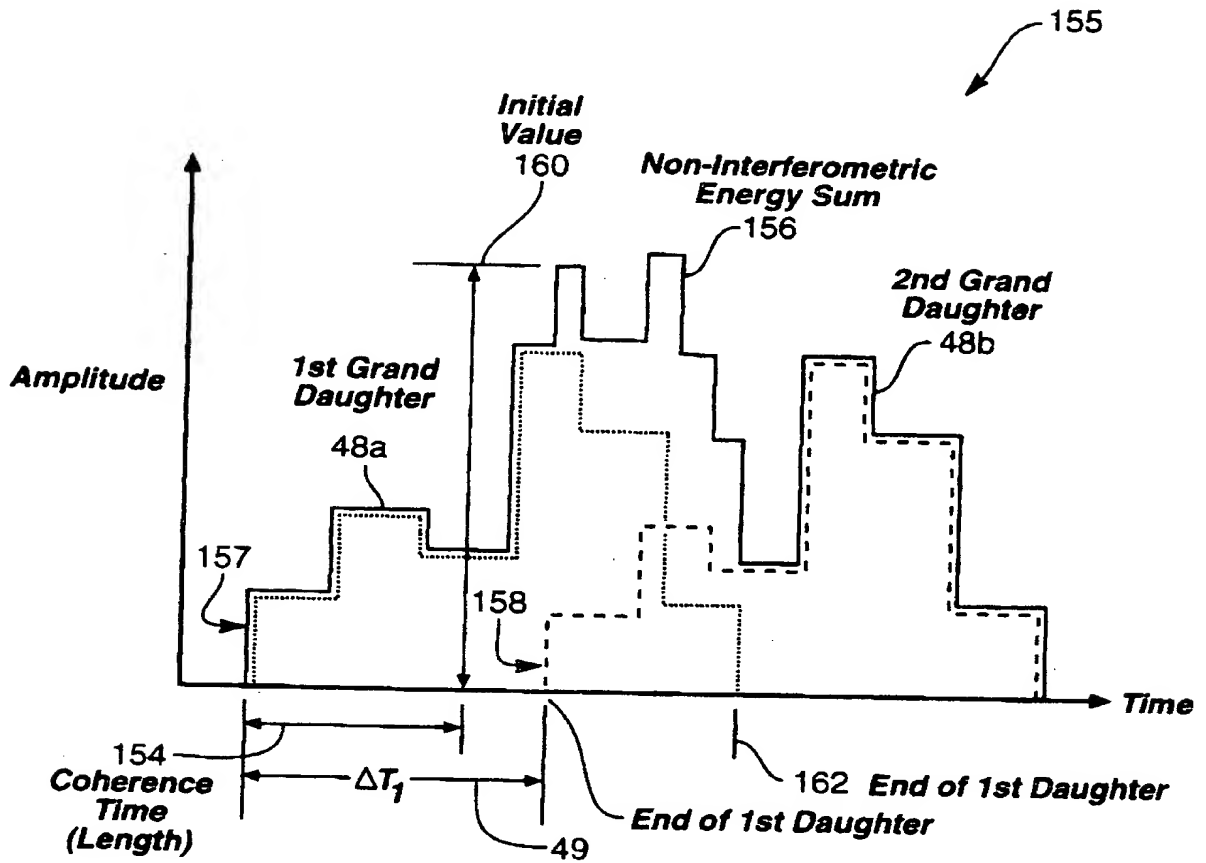


Fig. 19

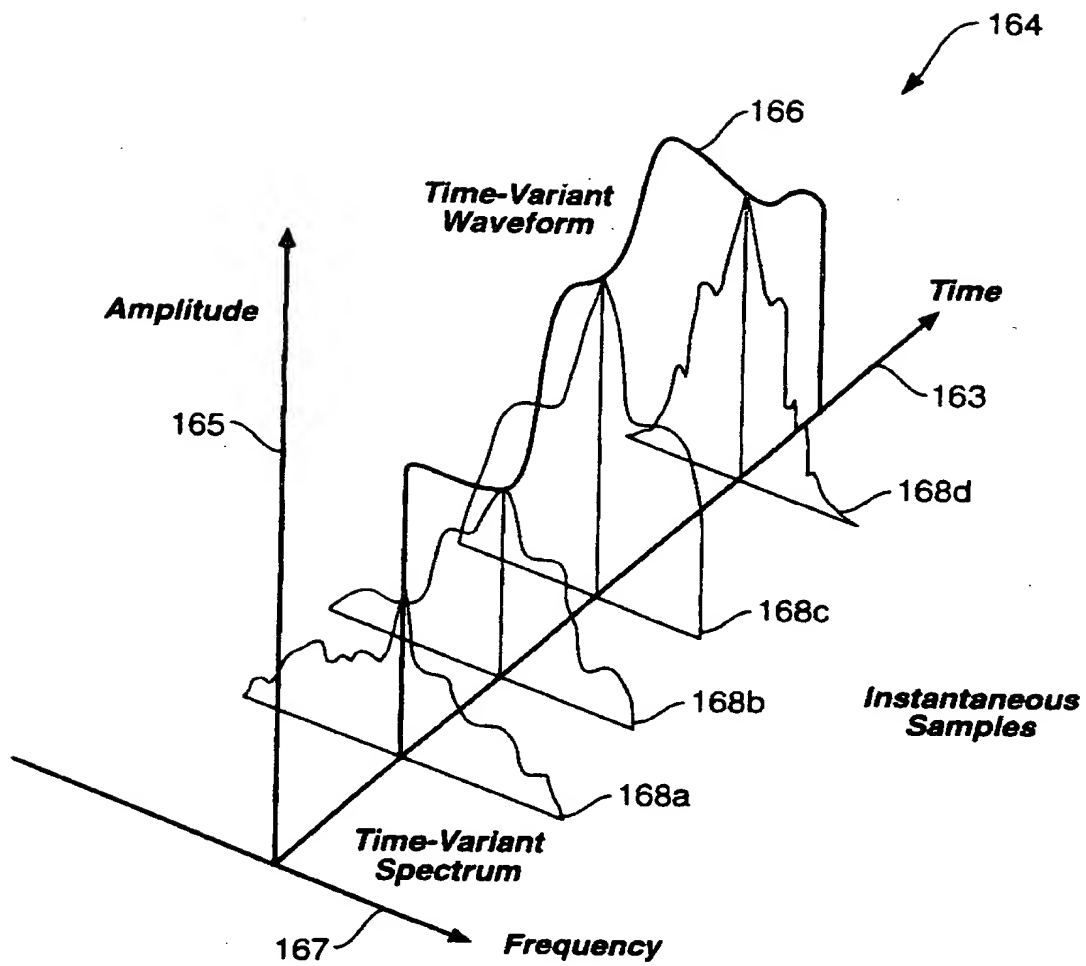


Fig. 20

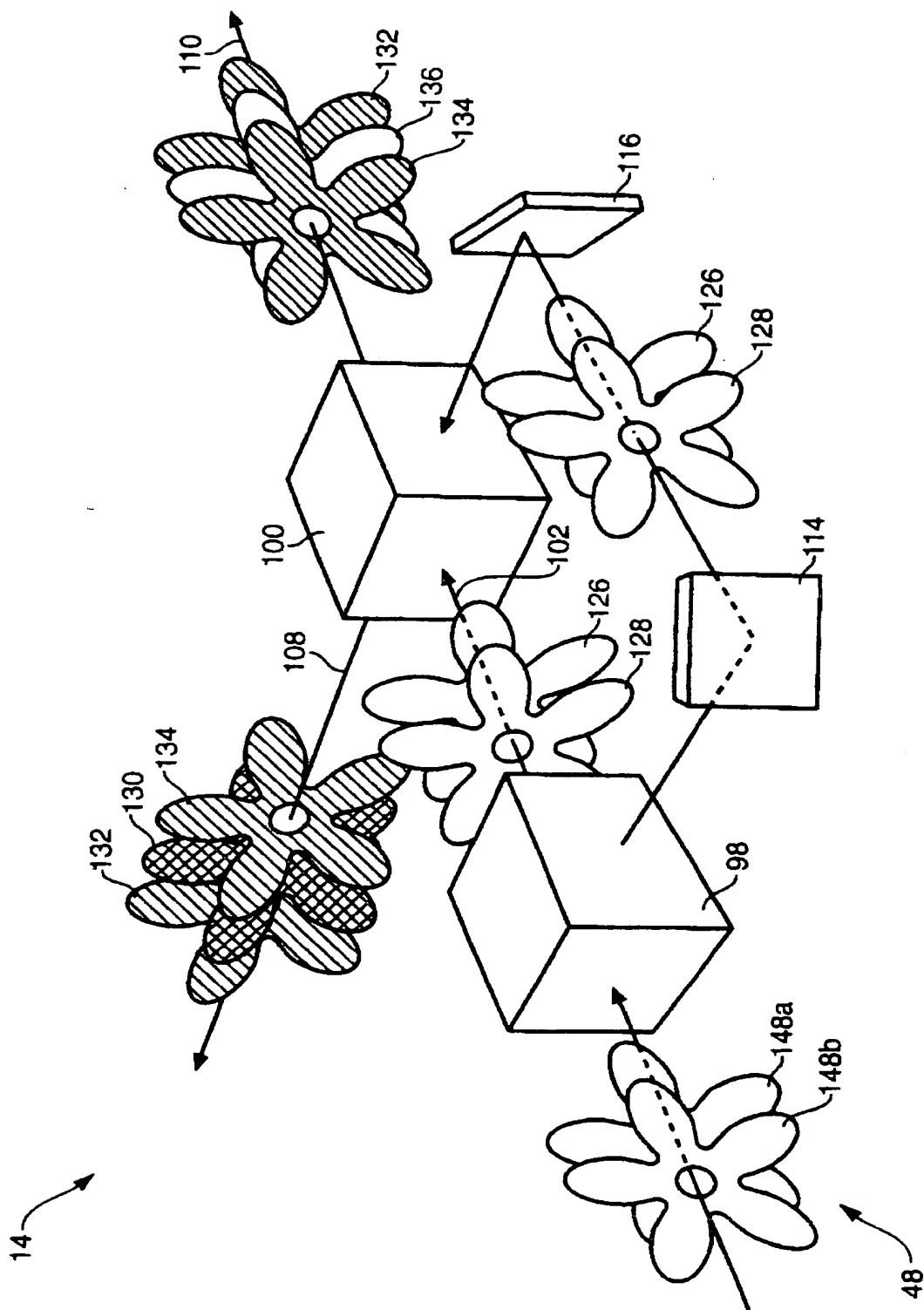
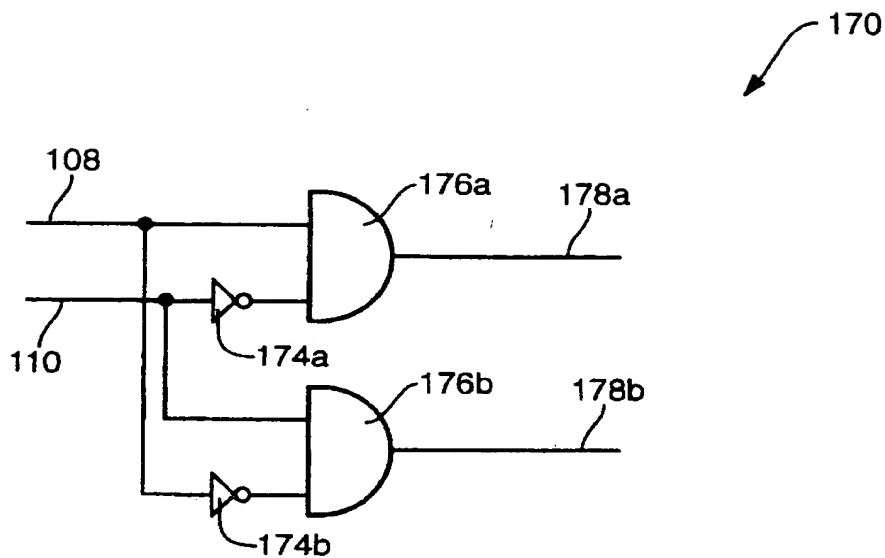
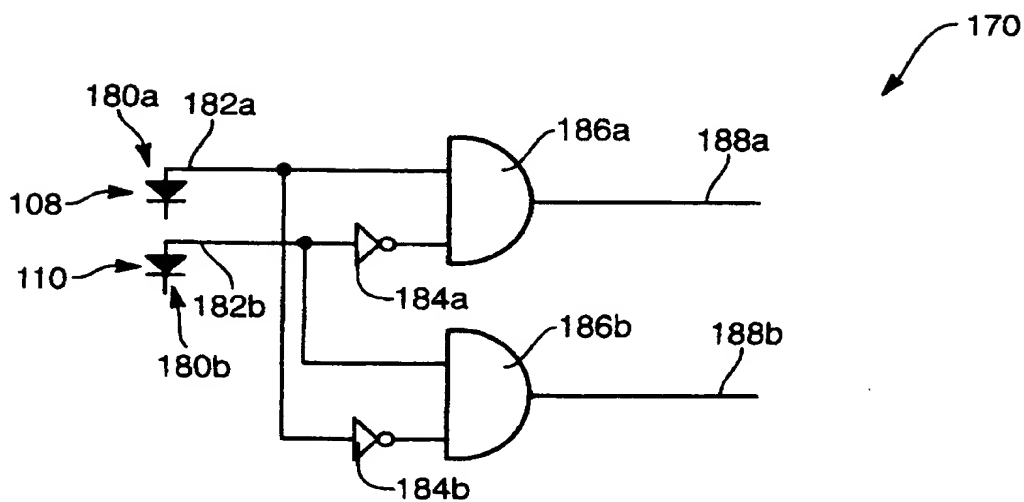


Fig. 21



Photonic Processor
Fig. 22



Electronic Processor
Fig. 23A

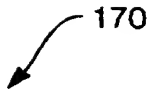
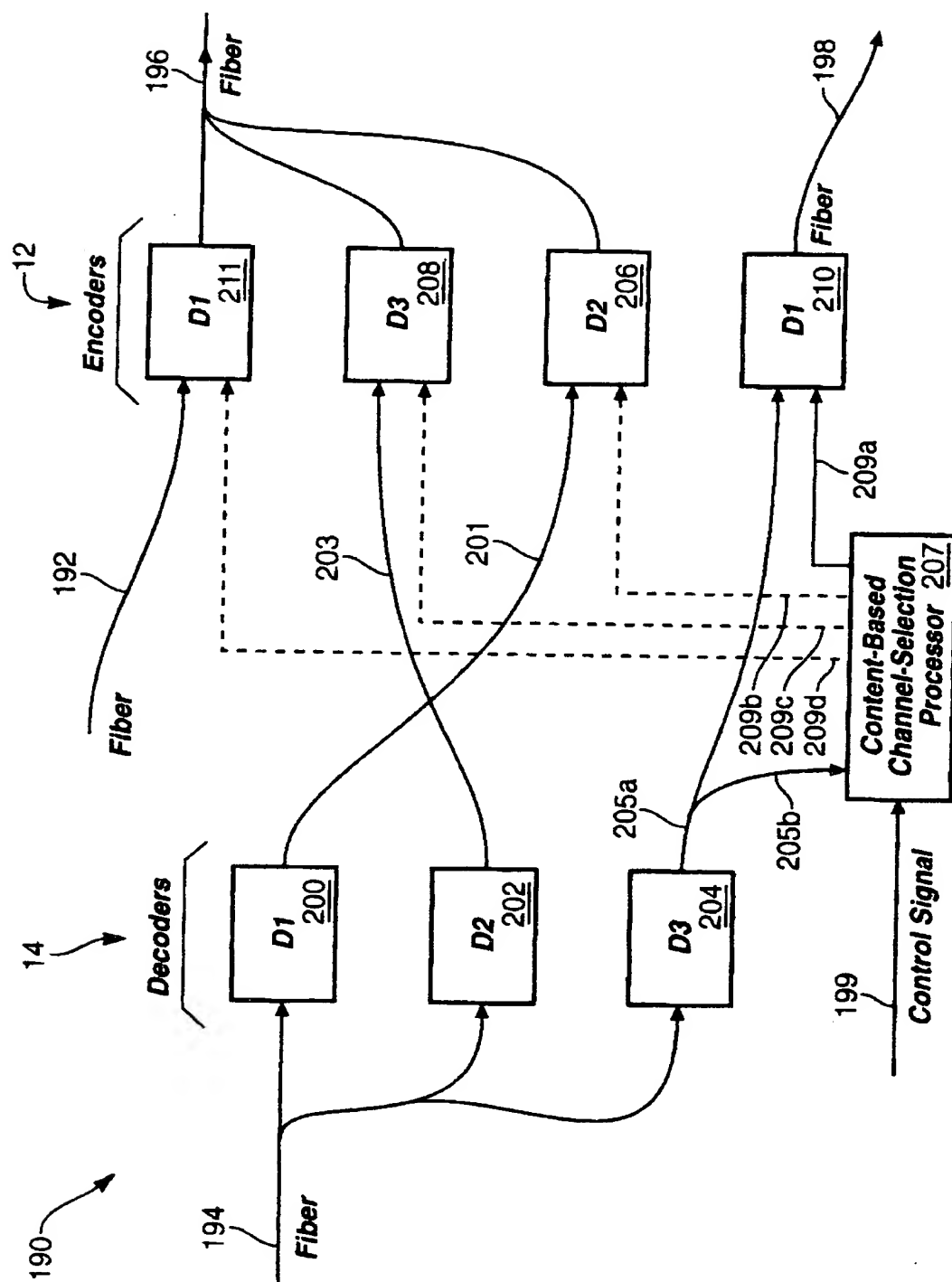
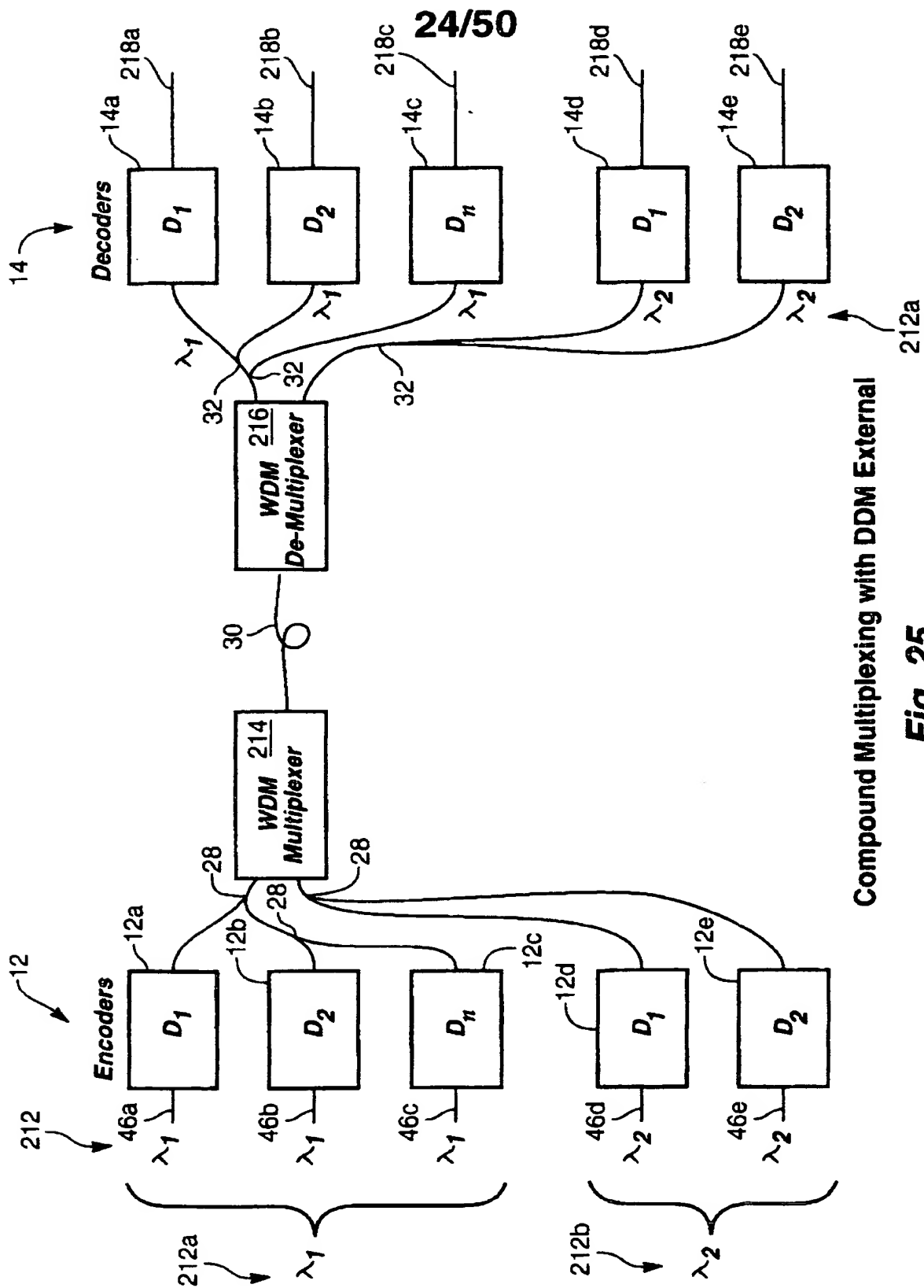


Fig. 23B



Drop/Rearrange/Add Unbuilding/Rebuilding

Fig. 24



Compound Multiplexing with DDM External

Fig. 25

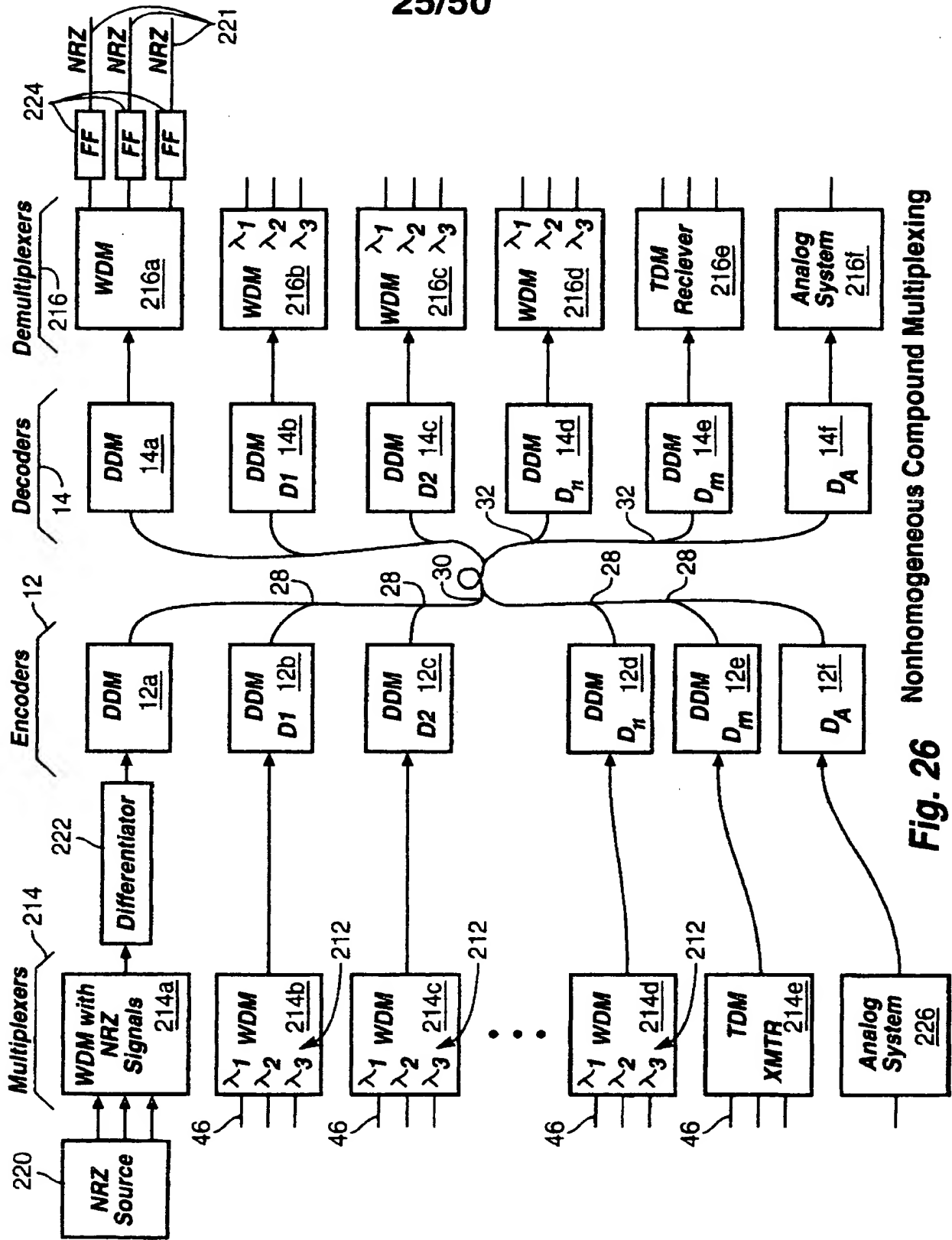
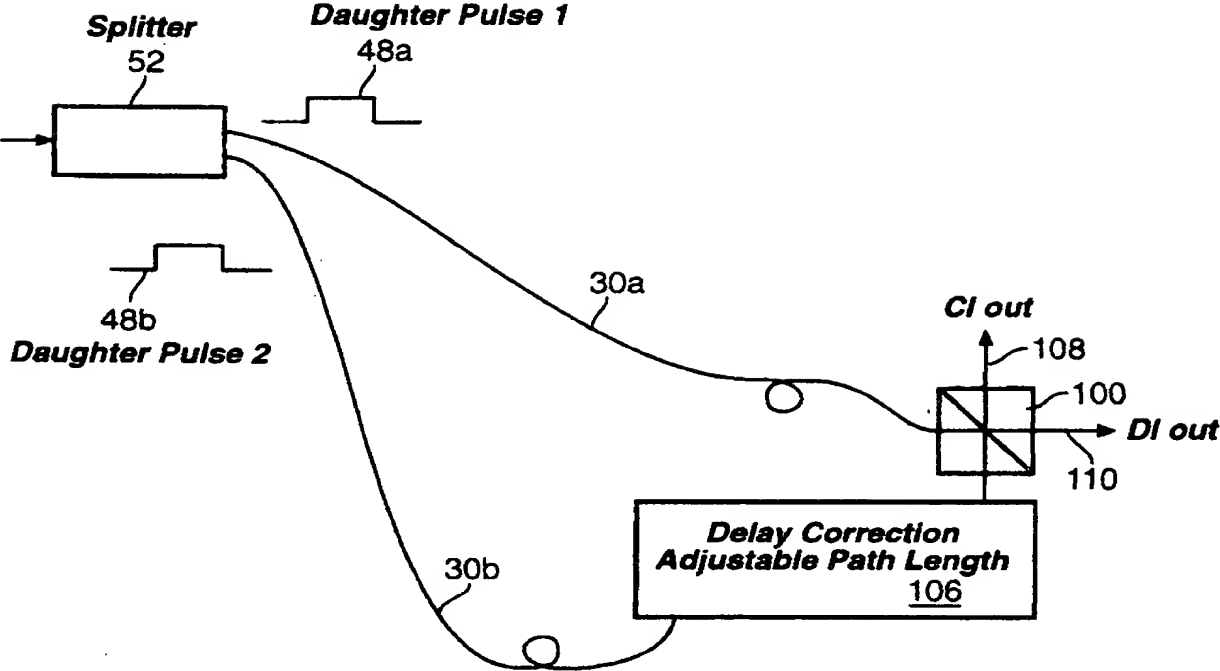


Fig. 26 Nonhomogeneous Compound Multiplexing



Multiple Delay Path
Integrated Delay and
Delay Correction

FIG. 27

00422T 80425460

Photonic NRZ Interface

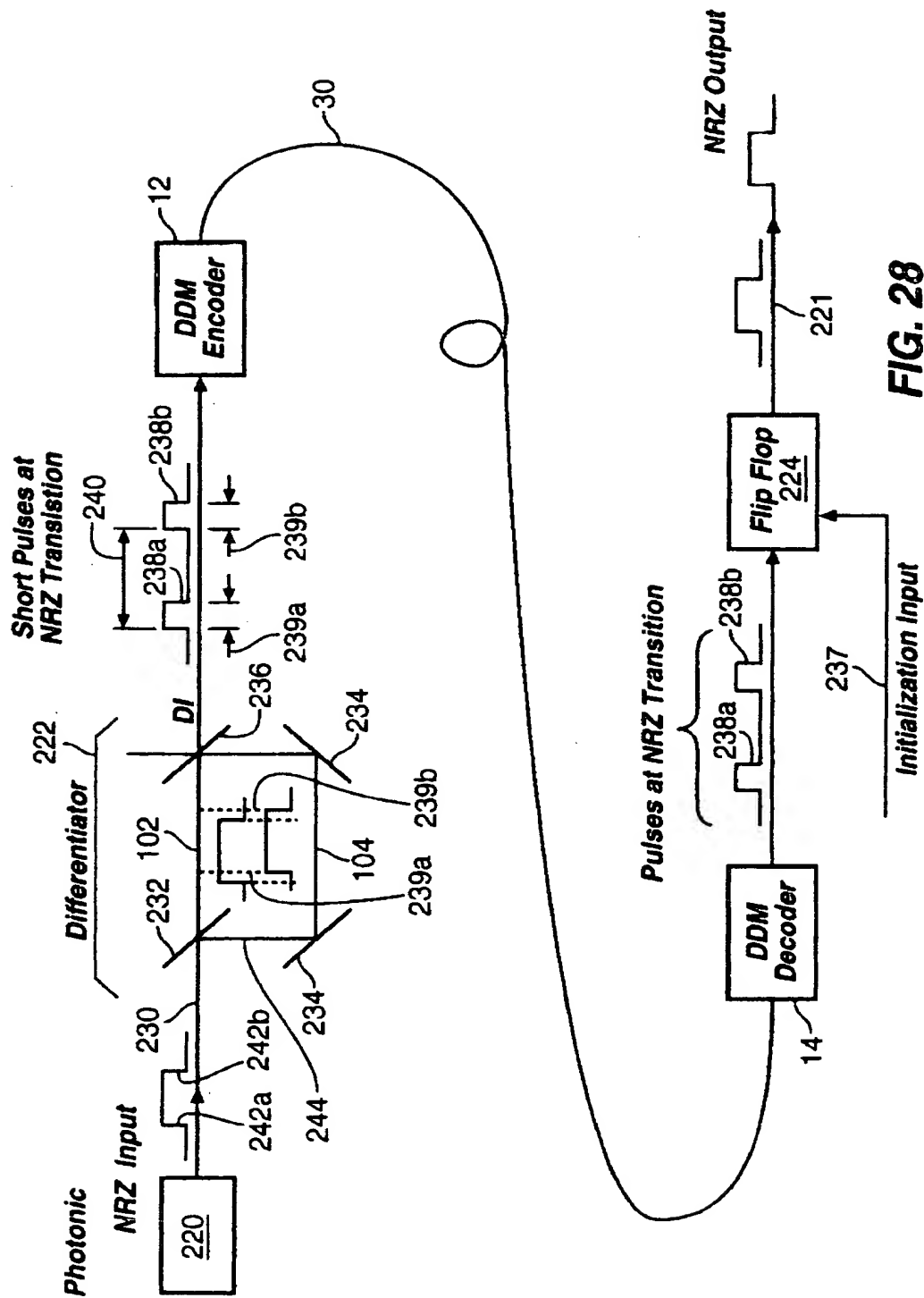


FIG. 28

28/50

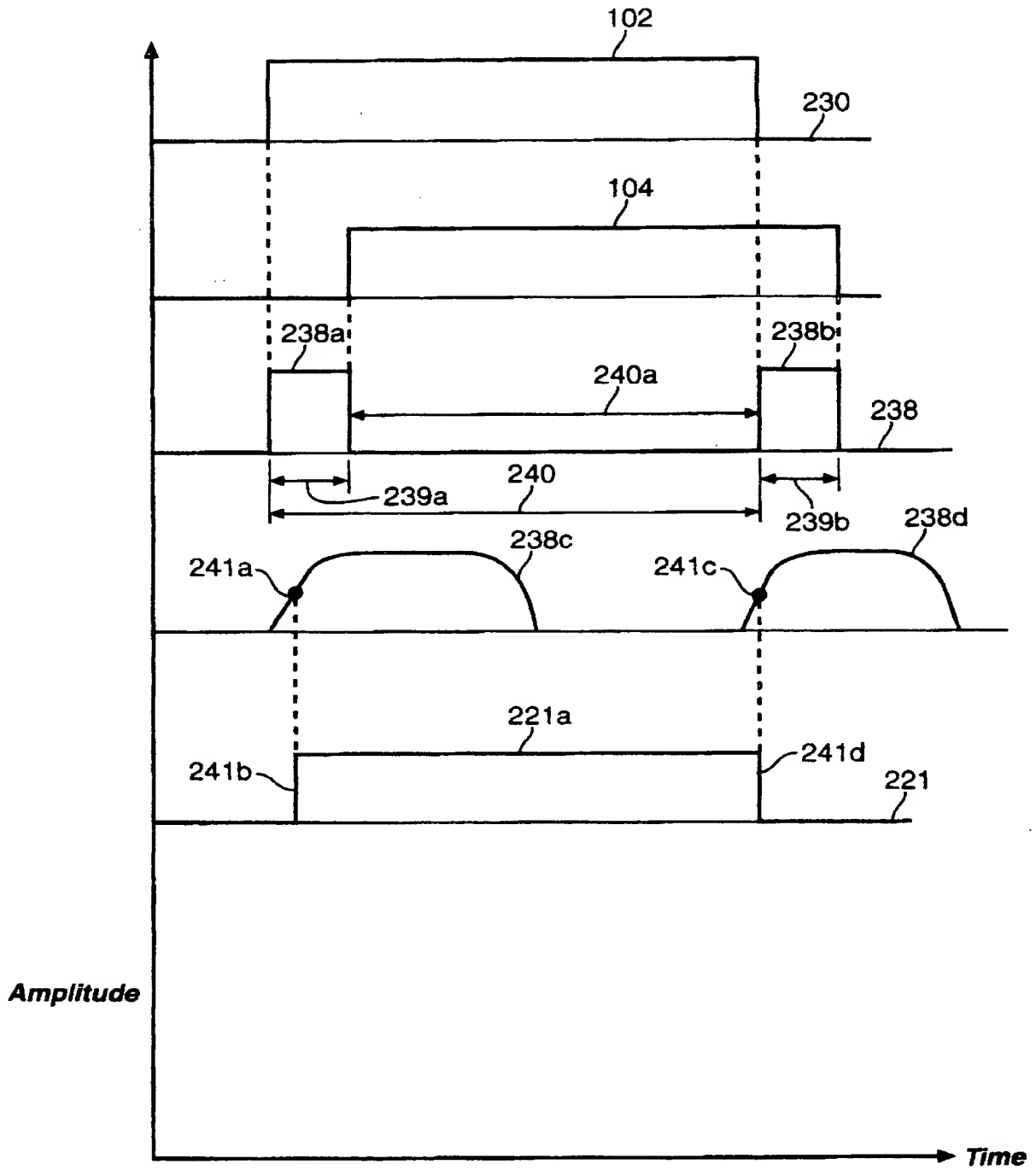
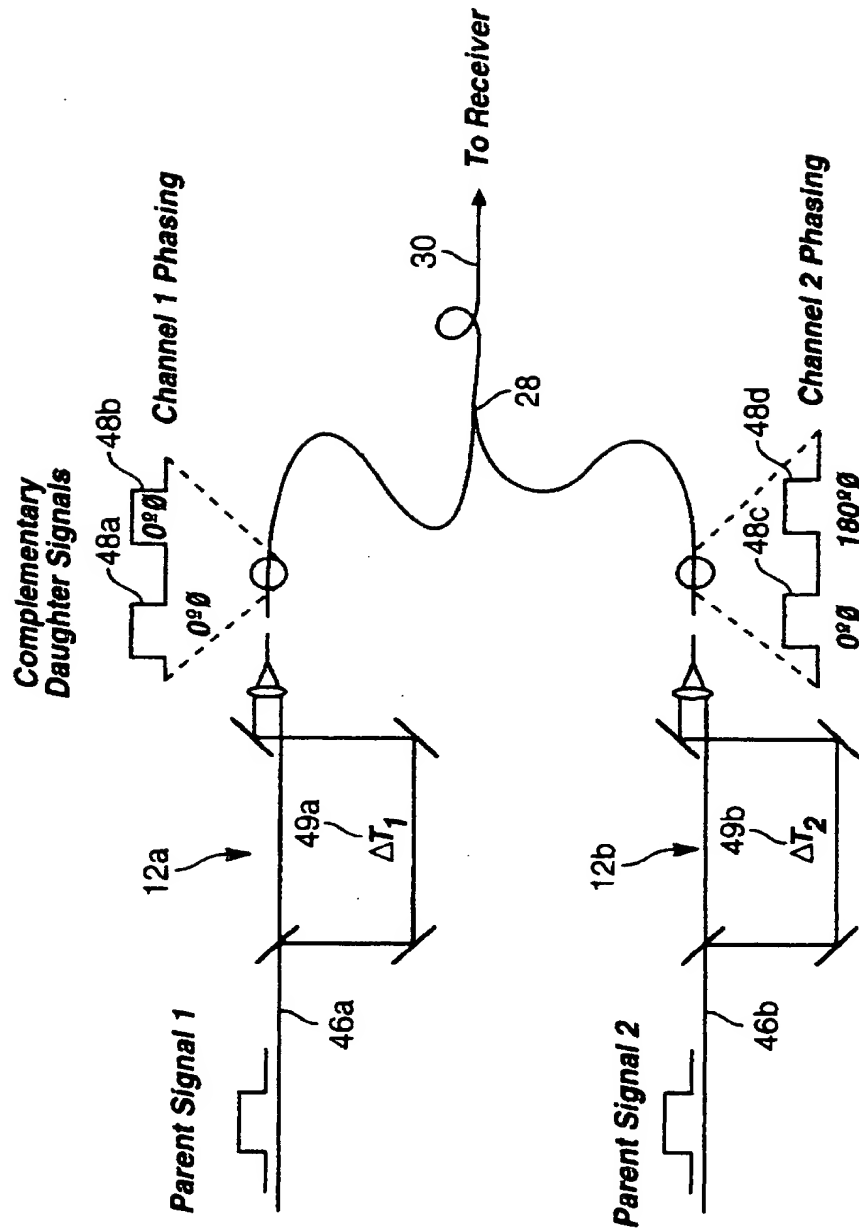


FIG. 29



Phase Sequenced Dual Channel Encoder

FIG. 30

Phase Sequenced Dual Channel Decoder

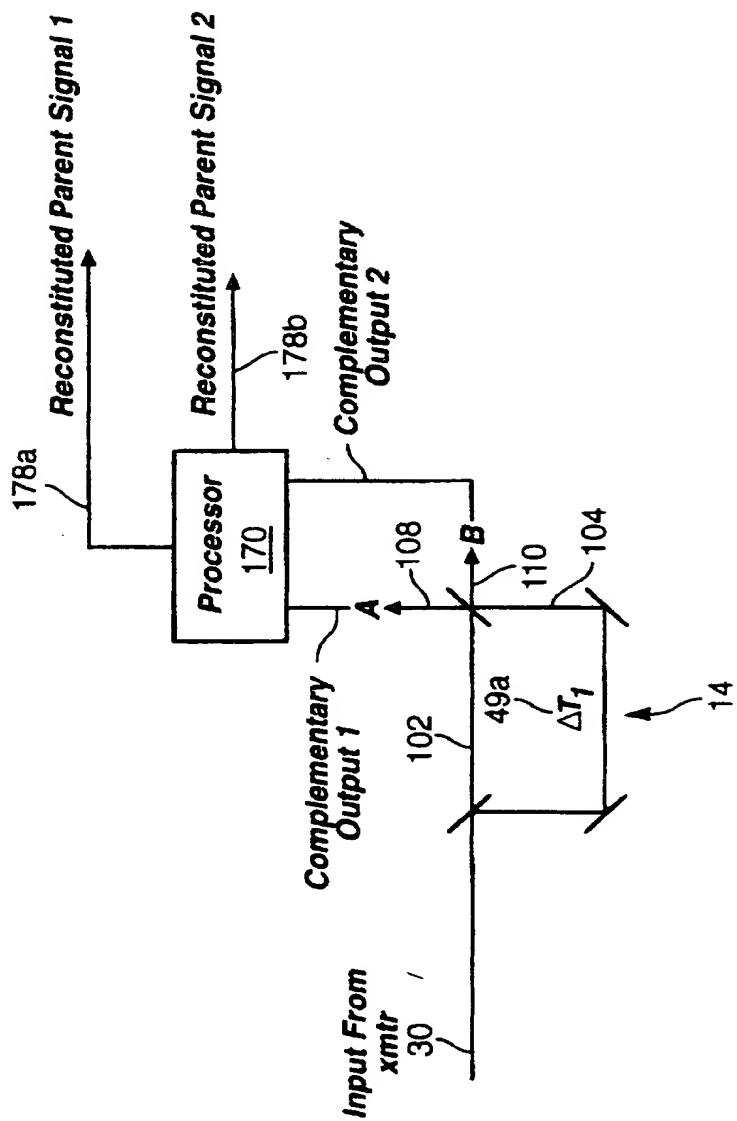


FIG. 31

Phase Sequence Timing

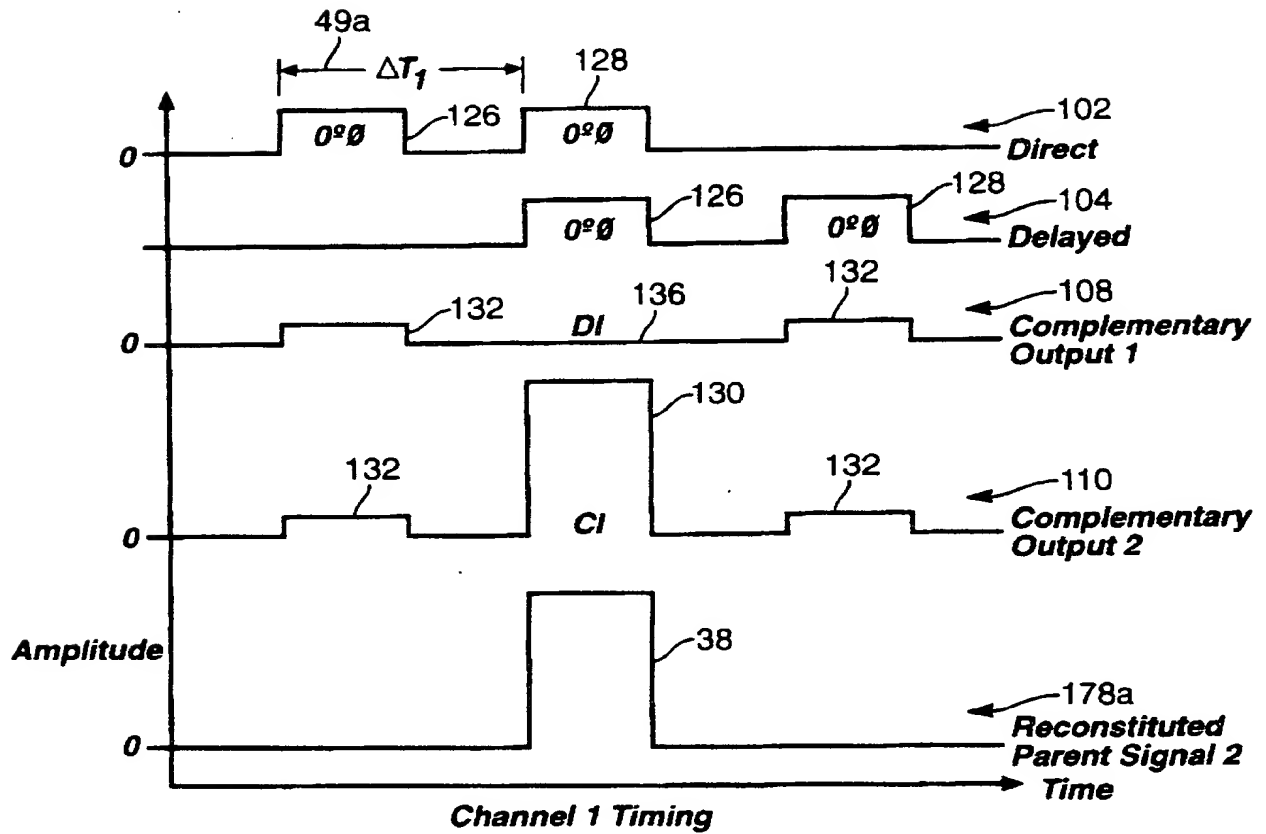


FIG. 32

Phase Sequence Timing

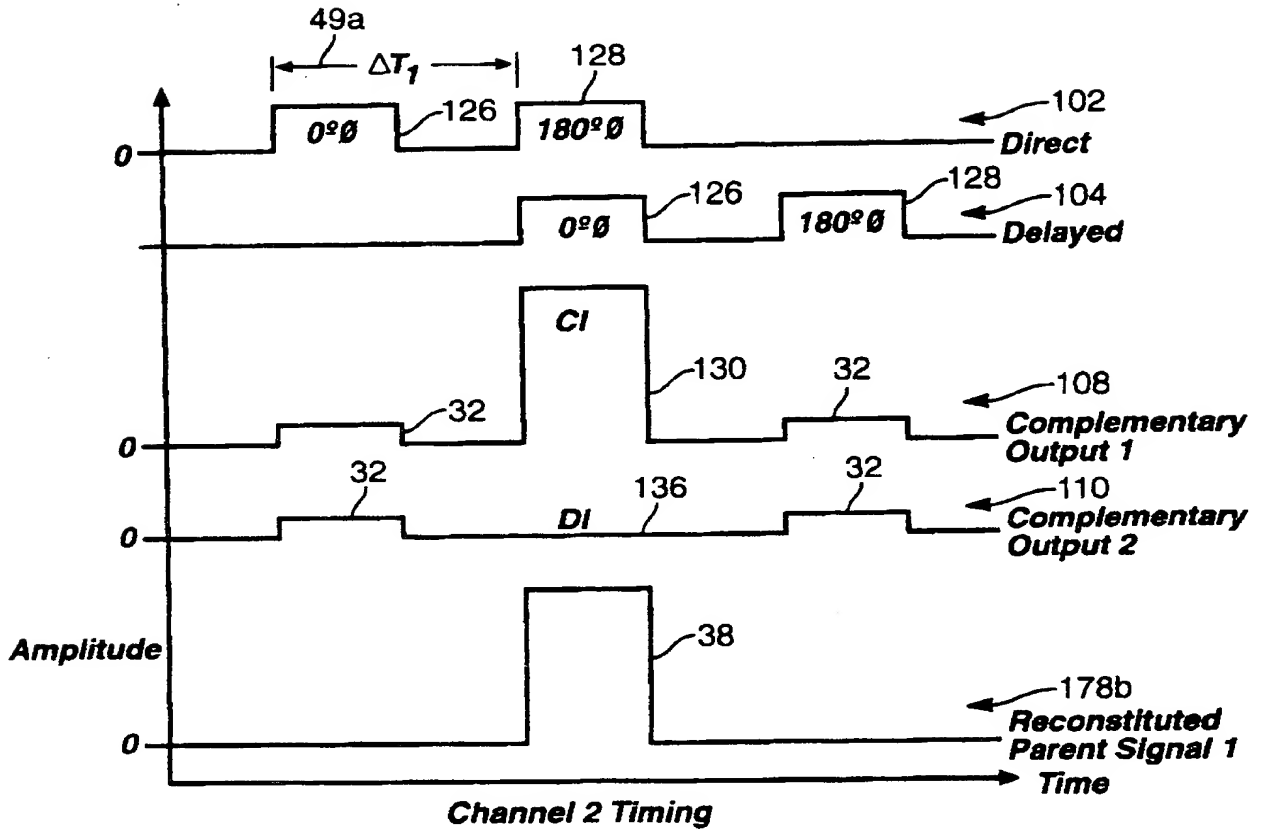


FIG. 33

Quadrature Encoding/Decoding Apparatus

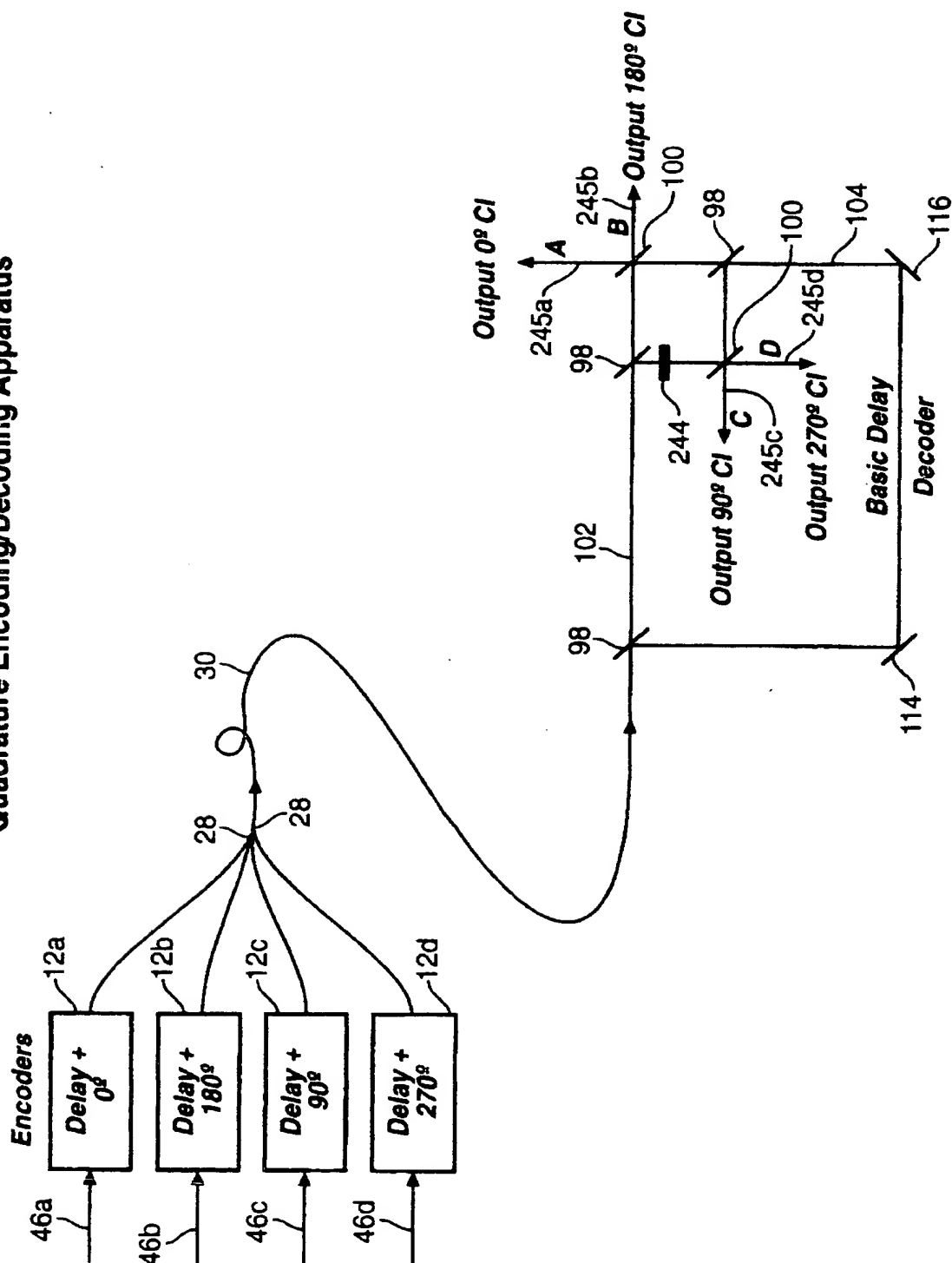


FIG. 34

		<i>Phase of Direct Signal</i>	<i>Phase of Delayed Signal</i>	<i>Quadrature Outputs</i>			
				<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
46a	Channel 1	0	0	<i>CI</i>	<i>DI</i>	<i>C = D</i>	
46b	Channel 2	0	180	<i>DI</i>	<i>CI</i>	<i>C = D</i>	
46c	Channel 3	0	90	<i>A = B</i>		<i>CI</i>	<i>DI</i>
46d	Channel 4	0	270	<i>A = B</i>		<i>DI</i>	<i>CI</i>

245a 245b 245c 245d

FIG. 35

Quadrature Wave Forms For One Channel

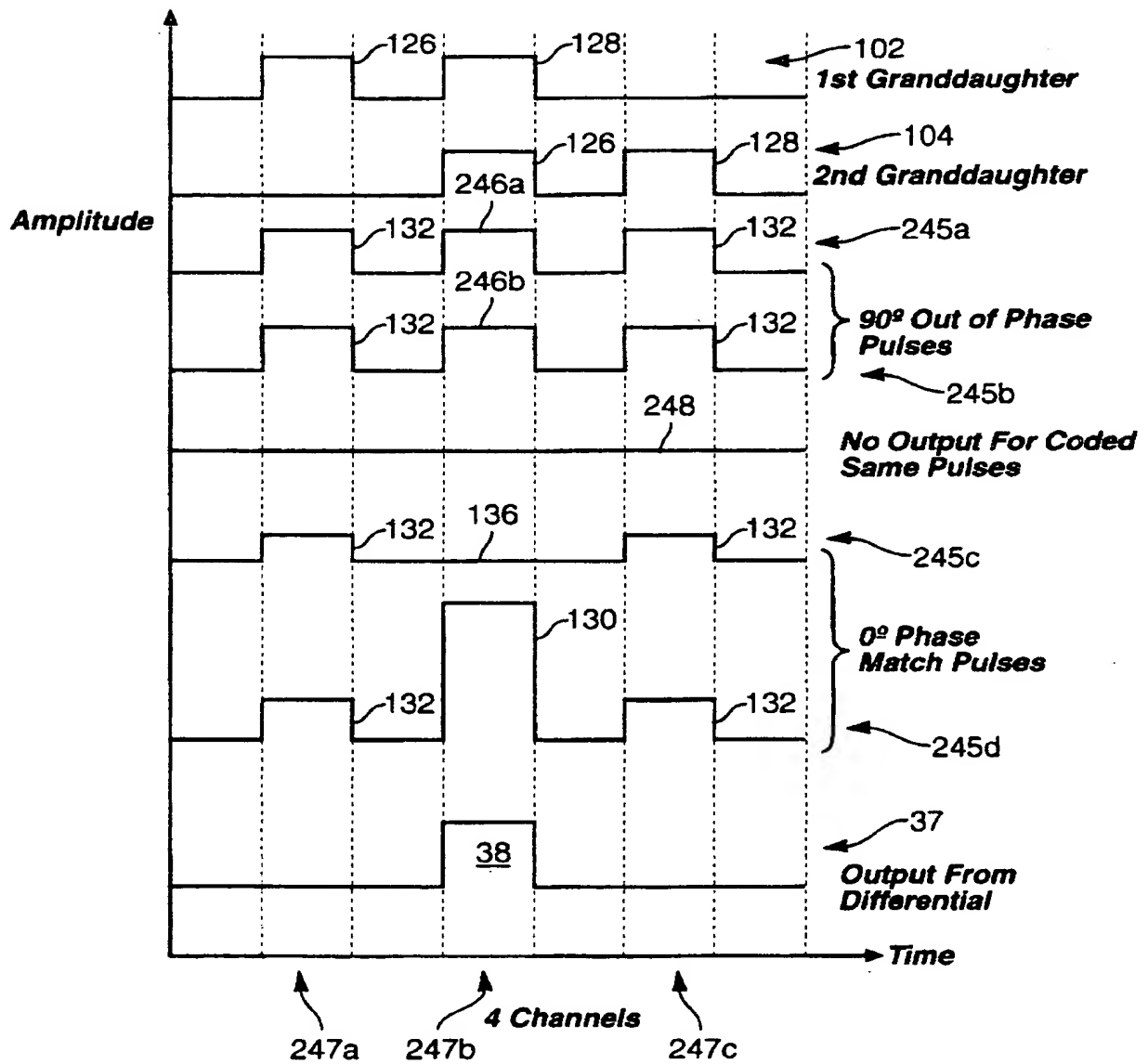


FIG. 36

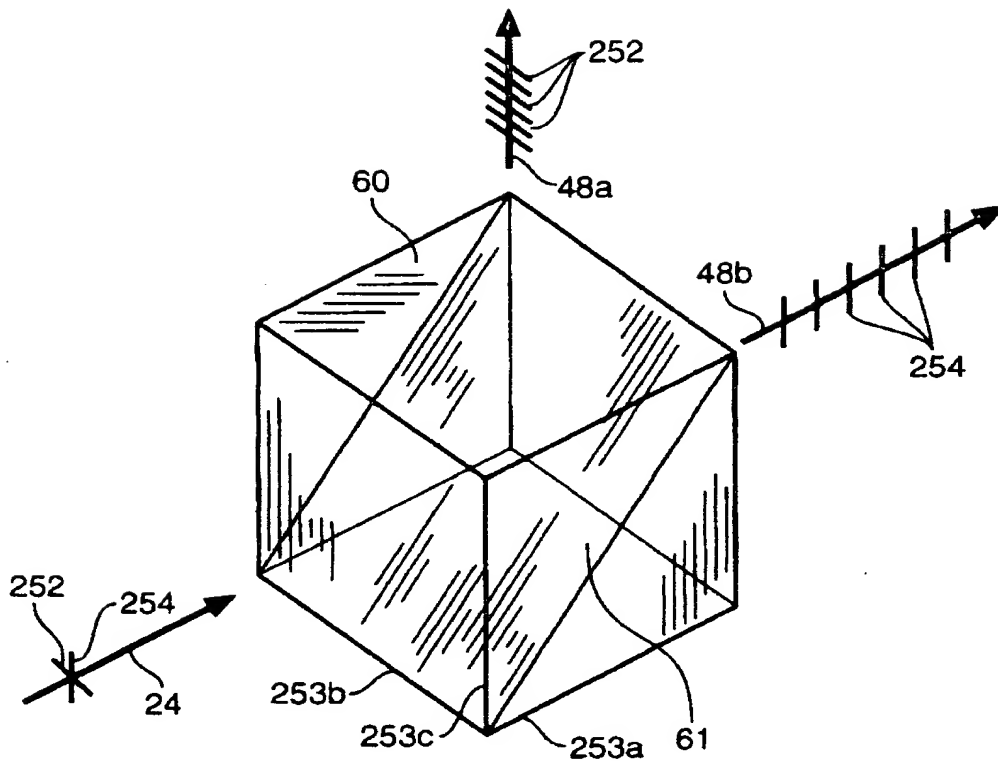


FIG. 37A

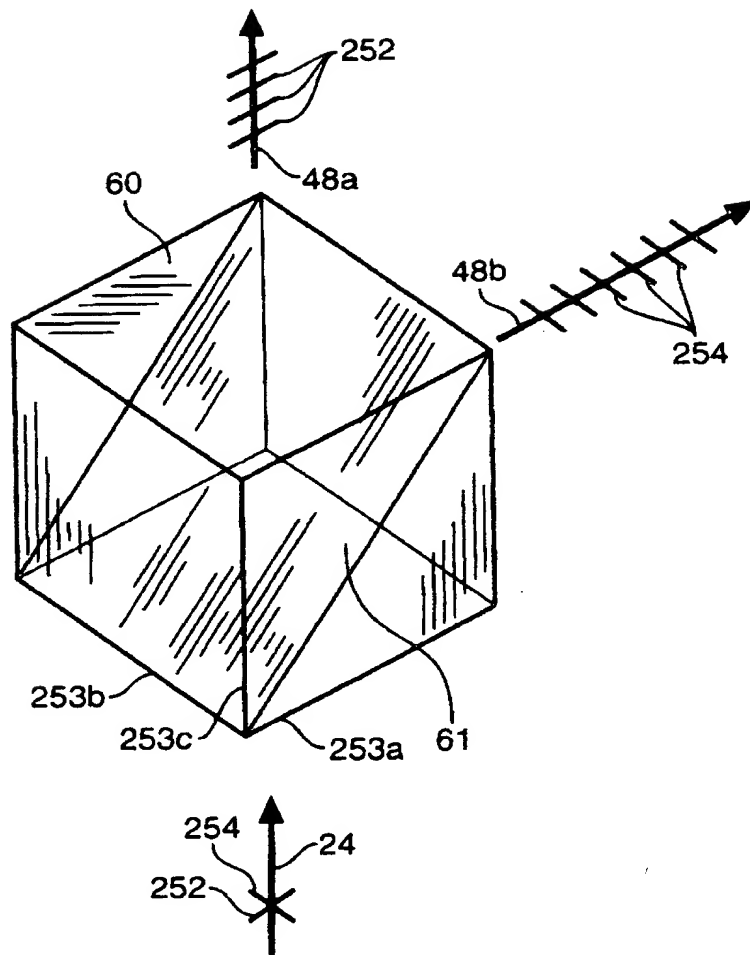
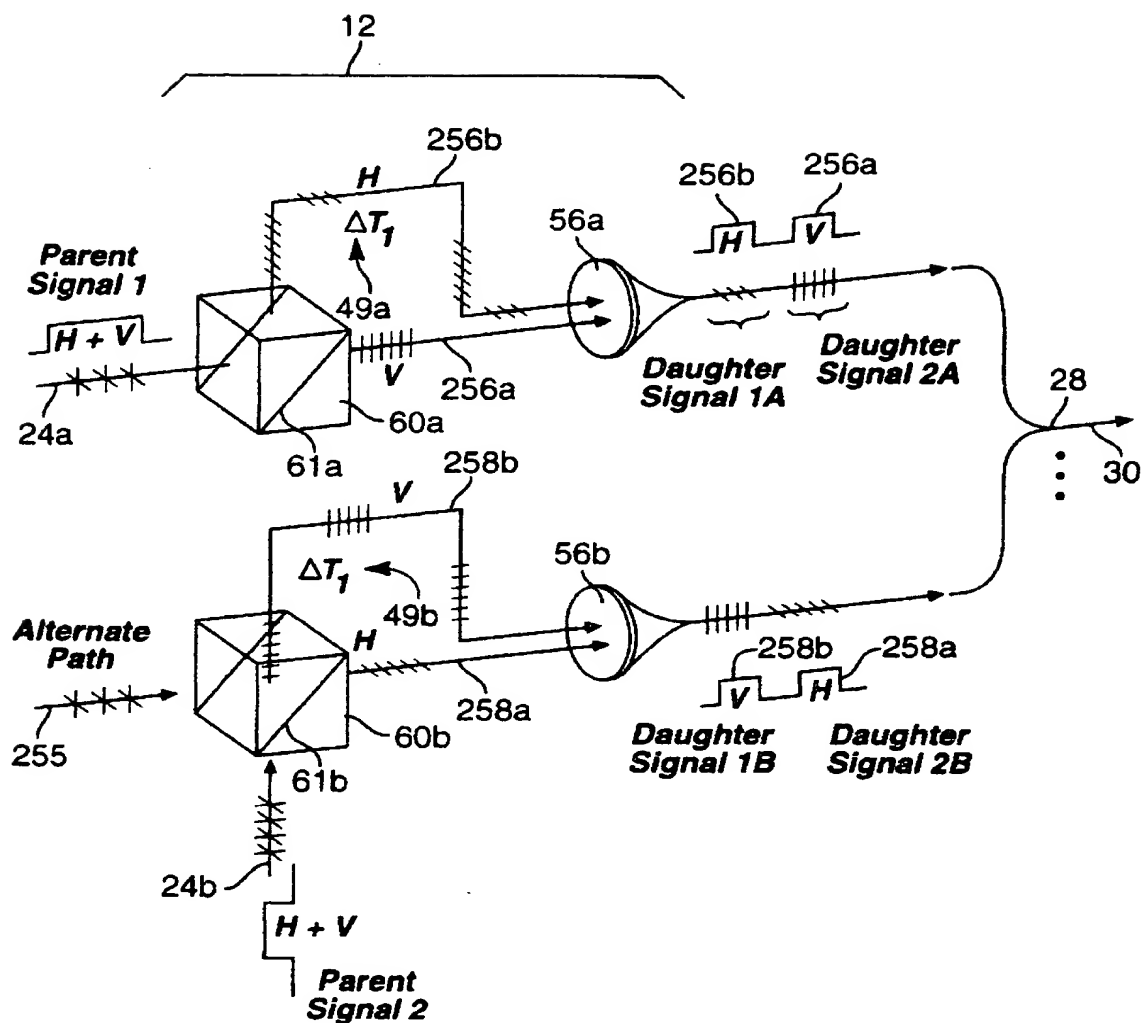


FIG. 37B

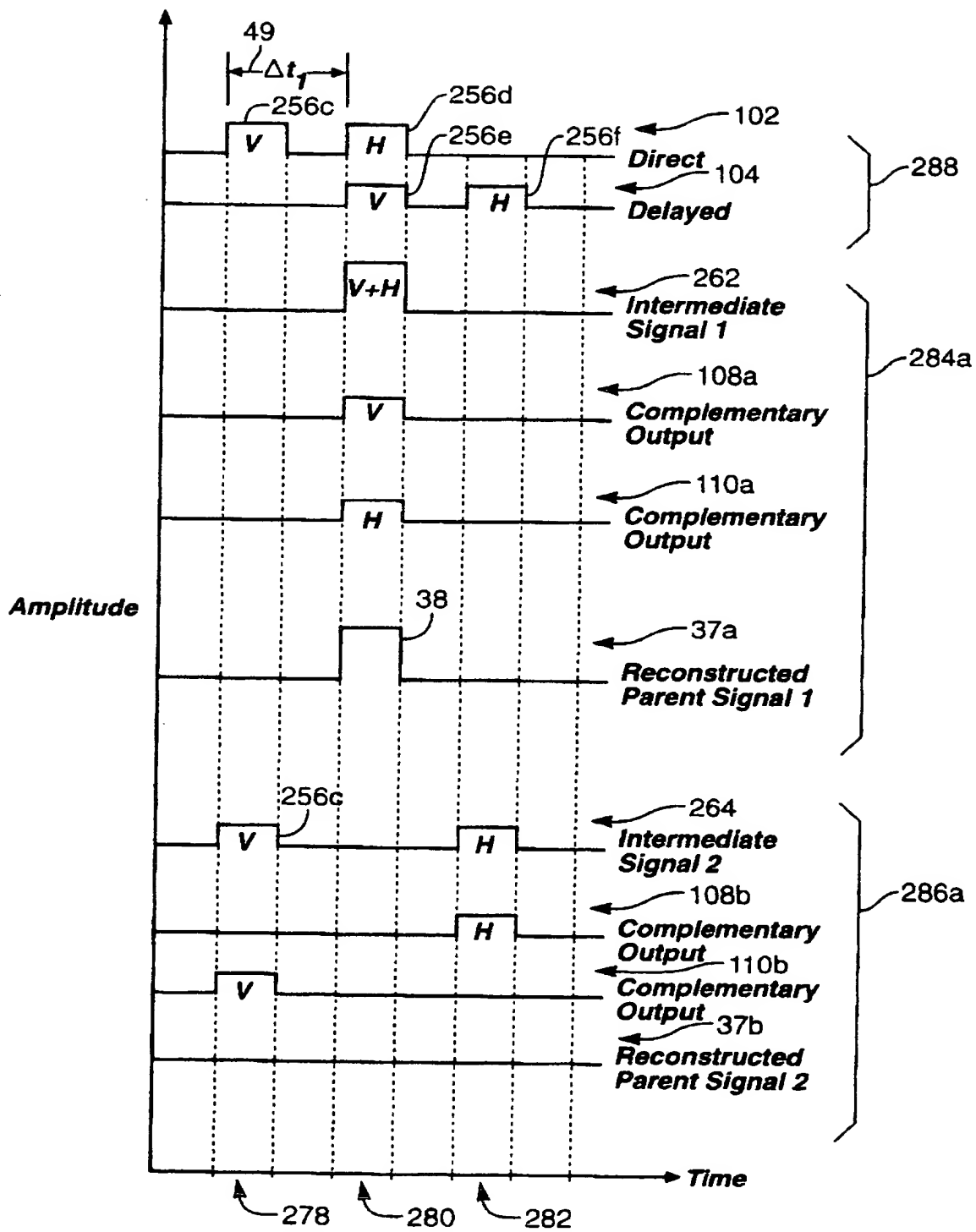


Double Encoder With Polarizations Sequenced to Differentiate 2 Channels Having the Same Time Delay Between Daughter Signals

FIG. 38

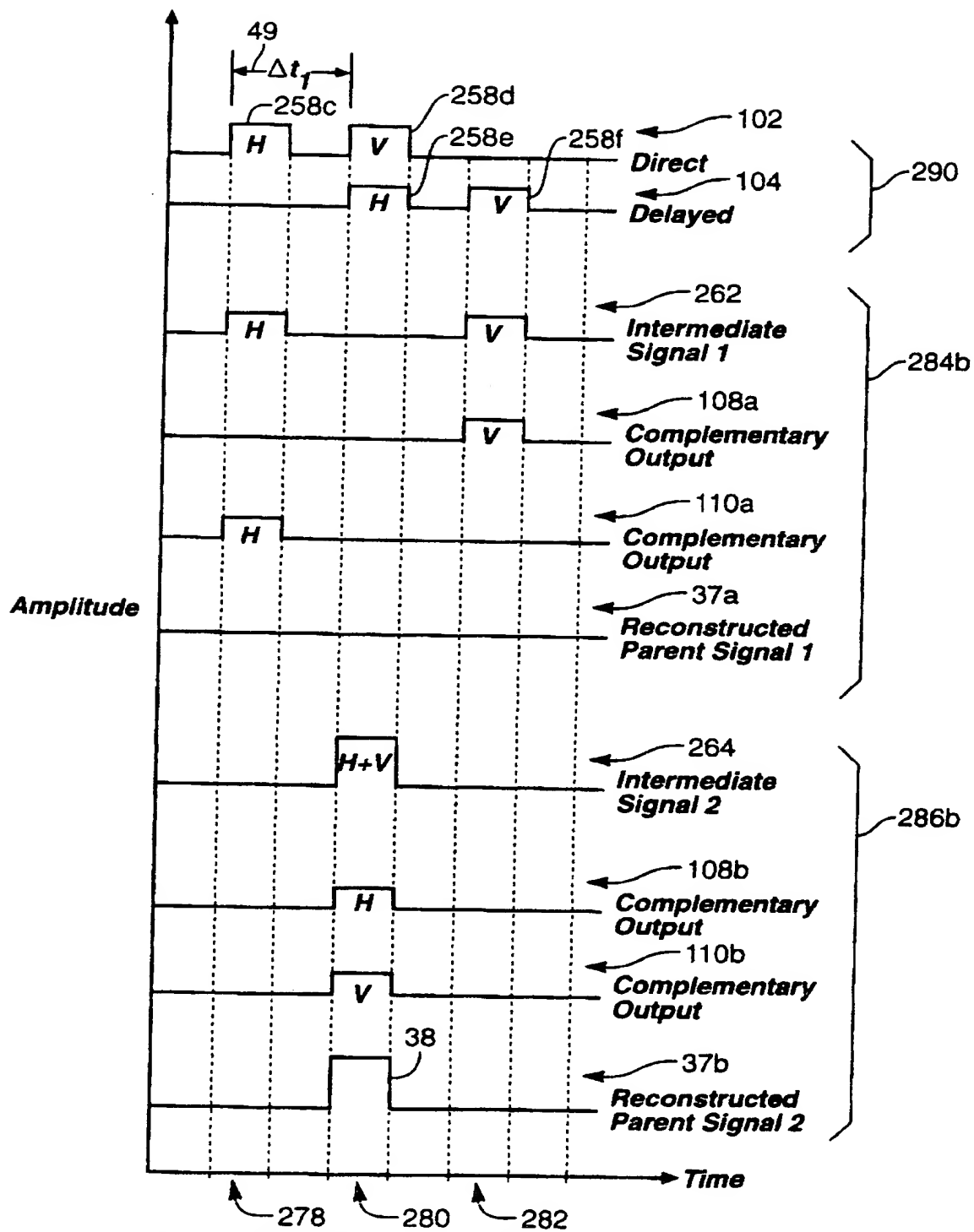


FIG. 39



Polarization Sequenced Channel 1 Timing

FIG. 40



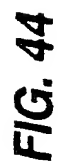
Polarization Sequenced Channel 1 Timing

FIG. 41





FIG. 43



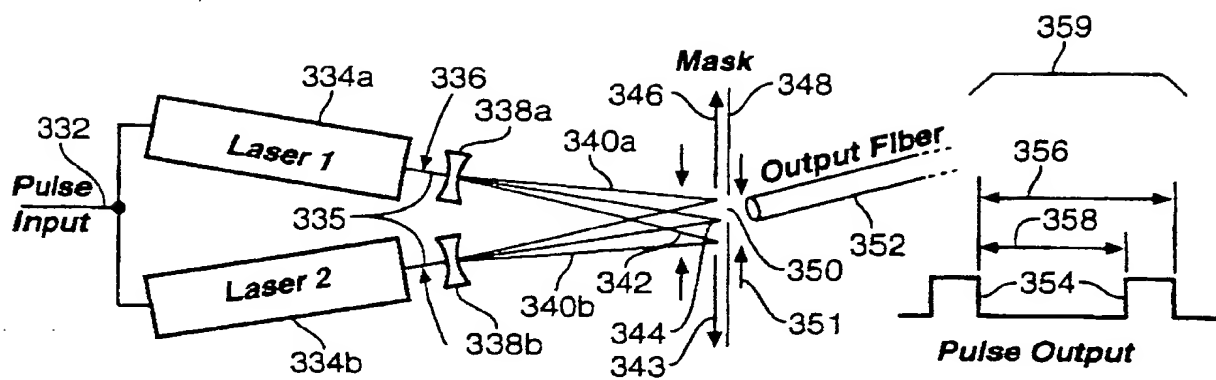


FIG. 45

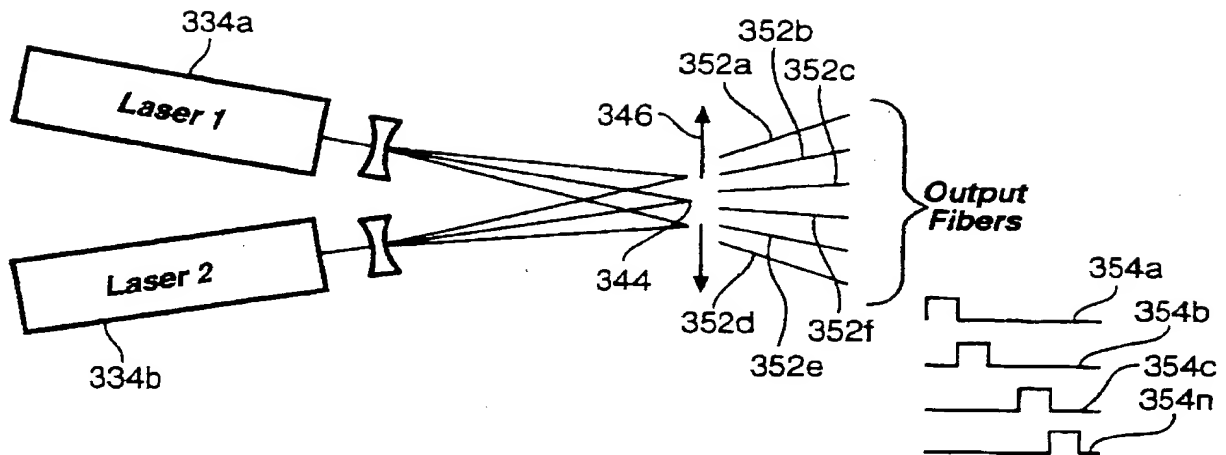


FIG. 46

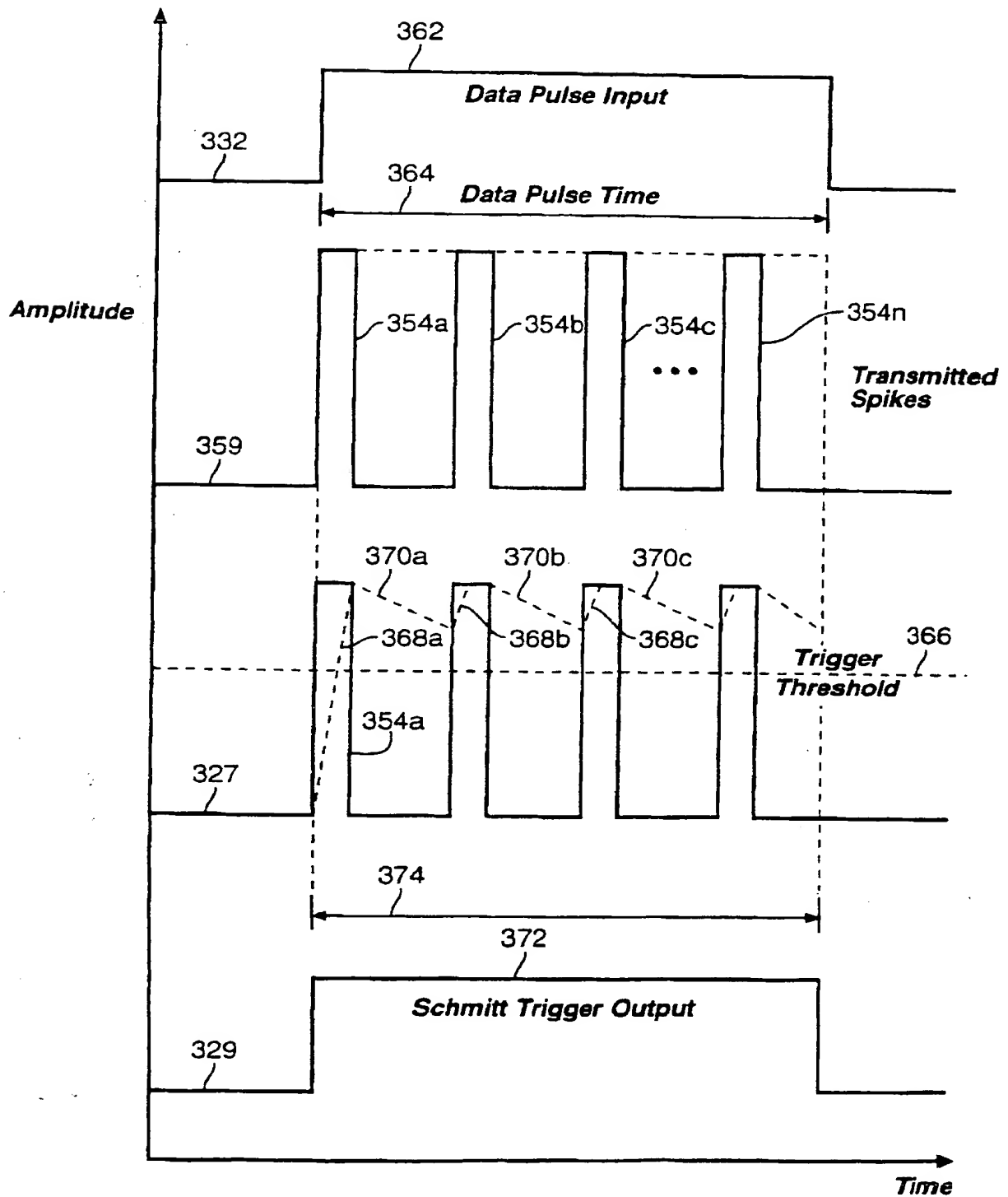


FIG. 47

004221 8045260

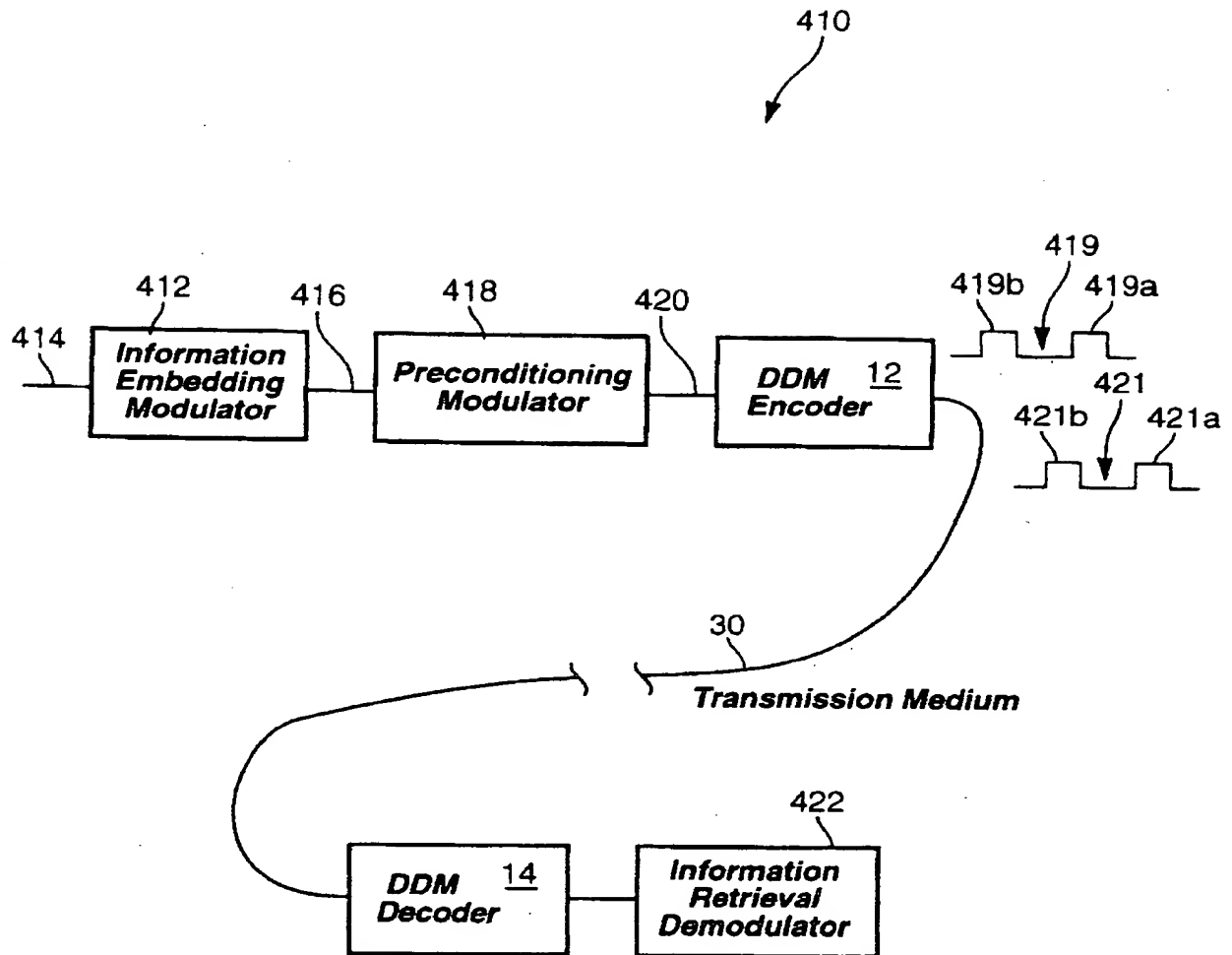


FIG. 48

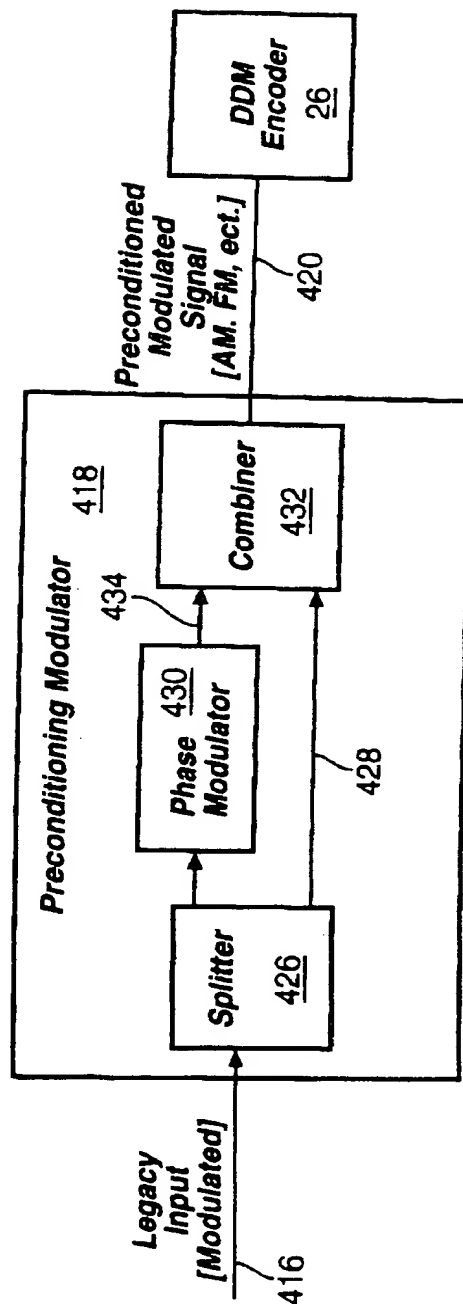


FIG. 49

